DOCTOR OF CLINICAL PSYCHOLOGY (DCLINPSY)

Doctorate in Clinical Psychology: Main Research Portfolio

1) Critical Literature Review: Clinician and patient experience of psychological formulation: a qualitative synthesis using meta-ethnography; 2) Service Improvement Project: Patient and staff views of psychiatric ward activities and efforts to increase choice: a qualitative study; 3) Main Research Project: Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety.

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Award date:
2017

Awarding institution:
University of Bath

Research Portfolio Submitted in Part Fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology

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Doctorate in Clinical Psychology

University of Bath
Department of Psychology

June 2017

Word Count by Components

Critical Literature Review ...…….…….…….…….8499

Clinician and patient experience of psychological formulation: A qualitative synthesis using meta-ethnography

Service Improvement Project……...…….……...…….5776

Patient and staff views of psychiatric ward activities and efforts to increase choice: A qualitative study

Main Research Project…….……...…….…….……5065

Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety

Executive Summary of Main Research Project.……...567

Connecting Narrative……...……...……...……...3280

Total Word Count……...…….……...23187

Table of Contents

Table of Tables

Critical Review of the Literature

Service Improvement Project

Main Research Project

Table of Figures

Critical Review of the Literature

Service Improvement Project

Main Research Project

Abstracts

Critical Literature Review: Clinician and patient experience of psychological formulation: A qualitative synthesis using meta-ethnography

Background: Formulation is generally deemed an essential part of mental health treatment and psychological practice. Considering this and the abundance of existing formulation frameworks, there is surprising paucity of research. Several reviews of the little quantitative evidence have already been conducted, but there has been no review of the existing qualitative literature. Inclusion of qualitative findings in reviews and evidence-based practice is important as they can provide a deeper understanding of patient and clinician experience. **Aims:** The current review thus aimed to: (1) systematically find, synthesise, and critique qualitative research on the experience of psychological formulation according to patients and clinicians; (2) use meta-ethnography to develop an interpretative conceptual model of existing literature to provide a better overview for patients, healthcare professionals, and policy makers within mental healthcare; and (3) make recommendations to improve practice and guide further research. **Methods:** Meta-ethnography was used to interpret and synthesise findings. A systematic search found 17 papers meeting inclusion criteria: ten regarding patient views, six regarding clinician views of formulation with patients, and four regarding clinician views of formulation with other staff. Quality was assessed using the Critical Appraisal Skills Programme's (CASP, 2017) qualitative appraisal tool. **Results:** Four core themes with 12 subthemes were identified: (1) "Function of formulation"; (2) "Intra-connection: Connecting with the self"; (3) "Inter-connection: Connecting with others"; and (4) "Wider context". Sensitivity analysis demonstrated overall theme pattern did not differ according to quality. **Conclusions:** Themes were synthesised using a "line of argument approach", producing a new conceptual model regarding patient and clinician experience of formulation. Clinical implications for patients and their carers, clinicians, and service managers, policy makers, and funders are discussed and directions for further qualitative and quantitative research are given.

Keywords: case conceptualisation, clinician experience, formulation, meta-ethnography, meta-synthesis, patient perspective, qualitative research, reformulation, review, service user experience, staff experience, therapist experience

Service Improvement Project: Patient and staff views of psychiatric ward activities and efforts to increase choice: A qualitative study

Background: Assessing staff and patient views of psychiatric inpatient activities is both clinically and economically important. However, no study has yet answered the National Institute of Clinical Excellence's (NICE, 2011a) call for qualitative research into the "activities and occupations service users want on inpatient wards". **Aims:** This paper aimed to respond to this call and fill gaps in the literature by exploring staff and patient views of activities in one acute psychiatric inpatient unit, including: which activities are viewed as most beneficial and best-liked, and why; which other activities participants wish to see offered; whether staff and patient views differ; and how efforts to increase choice are experienced. **Method:** Seven staff and three inpatients participated in two focus groups using open-ended interview schedules. **Findings:** Thematic analysis resulted in five core themes: 1) *Preferred Activities,* 2) *Benefits,* 3) *Challenges,* 4) *Choice,* and 5) *Improvement*. Each had two to six subthemes. **Conclusions:** Themes echoed the limited existing research and guidelines on psychiatric inpatient activity provision. Both groups identified their best-liked activities. Several activity suggestions and possible benefits of activities were described, alongside best-liked activities, experience of choice, and challenges to these. Both similarities and differences were found between staff and inpatients. **Implications:** Further research to explore activities in mental health units with inpatients and staff from different professional backgrounds is needed to continue developing evidence-based guidelines.

Keywords: acute mental health, acute psychiatry, crisis, inpatient ward, mental healthcare, patient satisfaction, patient participation, qualitative research, service users' views, treatment, United Kingdom

Main Research Project: Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety

Background: Research demonstrates significant overlap between social anxiety (SA) and paranoia, relating to comorbidity, shared psychological processes, and developmental pathways. Taylor and Stopa (2013) suggest heightened anxiety can temporarily shift individuals with trait-SA towards experiencing increased paranoia, but this has not been experimentally investigated. **Aims**: The present study aimed to test this theory by evaluating the effects of an anxiety-task on state-paranoia and state-SA in three groups: those with clinical trait-SA (SA-group), those with both clinical trait-SA and trait-paranoia (SAP-group), and healthy controls. **Method:** 47 participants (twelve SAP-participants, ten SA-participants, and 25 controls) were asked to complete one sociodemographic and four baseline questionnaires (*Social Anxiety Interaction* and *Social Phobia Scales*, *Green et al. Paranoid Thoughts Scale*, and *Depression Anxiety Stress Scale-Short Form*) to evaluate trait-levels of SA, paranoia, and affect, respectively. Participants then completed three *Visual Analogue Scales* (VAS) before and after an anxiety-task (*Bentall Anagrams Task*) to assess differences in state-SA, state-paranoia, and state-affect. **Results**: Contrary to previous research, results did not find an effect of anxiety-task on state-symptomatology. Although findings supported hypotheses regarding differences between state-SA and state-paranoia scores before the anxiety-task, they therefore did not substantiate the hypothesis that the anxiety-task would lead to increased state-paranoia for individuals with SA. **Discussion:** This is the first study that aimed to experimentally evaluate Taylor and Stopa's (2013) hypothesis and one of few to include both clinical groups and controls. Due to failed manipulation of the anxiety-task, the experiment was not a true test of their hypothesis. Several possible reasons are discussed with important implications for research.

Keywords: paranoia, social anxiety, social anxiety disorder, social phobia, psychosis

Critical Literature Review

Clinician and patient experience of psychological formulation: A qualitative synthesis using meta-ethnography

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Date of submission: 21st June 2017

Word count: 7697 words (not including contents pages, executive summaries, tables, figures, appendices, and reference lists)

Journal: *Social Science and Medicine* due to being an international and interdisciplinary journal, previously publishing meta-ethnographies relating to mental healthcare, and having one of the highest impact factors amongst relevant journals (see Appendix A for author guidelines).

Critical Literature Review

Clinician and patient experience of psychological formulation: A qualitative synthesis using meta-ethnography

"The significant problems we face cannot be solved at the same level of thinking we were at when we created them" – Einstein (1879-1955; cited by Corrie & Lane, 2010)

Background

Formulation has been acknowledged as core competency of psychology ever since its inclusion in clinical psychology regulations in 1969 (Division of Clinical Psychology, DCP, 2011). It first emerged in the 1950s from the scientist-practitioner paradigm, partly as alternative to conventional psychiatric diagnosis (see Shapiro's 1951 paper regarding hypothesising, gathering and testing information, and reformulation; Corrie & Lane, 2010; DCP, 2011; Thew & Krohnert, 2015). Since then, its importance has been increasingly recognised. It is enshrined within guidelines of various professional bodies, including the British Psychological Society (BPS) and its DCP (DCP, 2010; Skinner & Toogood, 2010), Health Professions Council (HPC, 2009), and American Psychological Association (APA, 2006). Some propose it is formulation that differentiates lay support from psychological intervention (Butler, 1998). Formulation is therefore considered central to the practice of applied psychologists at all levels, including in sports and exercise, counselling, forensic, educational, health, and clinical psychologies (Corrie & Lane, 2010; HPC, 2009). Beyond psychology-specific standards, formulation is also included in the UK psychiatrists' training curriculum (albeit with slight differences; RCPsych, 2010) and is promoted by the National Institute of Clinical Excellence (NICE) as essential part of treatment for numerous mental health disorders, including psychosis (2014b), generalised anxiety disorder (2011), and bipolar disorder (DCP, 2011; 2014a).

Formulation: Definition, Components, Theories, and Models

Definition. Despite the term's prominent use and formulation's central role in mental healthcare, no agreed definition exists (see Corrie and Lane (2010) and Johnstone and Dallos (2014b) for overviews of existing definitions). The BPS (2008) offers the following definition:

> *"Psychological formulation is the summation and integration of … knowledge … acquired by … assessment … that may involve psychological, biological and systemic factors and procedures. [It] draws on psychological theory and research to provide a framework for describing clients' problem[s] or needs, how [they] developed and [are] being maintained*" (p.ii).

Formulation can refer to ongoing, iterative sense-making processes regarding a client's presenting problems; explanations or objects arising from these processes (e.g. diagrammatic or written formulations); or distinct events (e.g. team formulation meetings; DCP, 2011; Redhead, Johnstone et al., 2015). Furthermore, formulation can be more complex or "full" (e.g. longitudinal formulations), or

more "partial" (e.g. communication of "formulation-informed thinking" to colleagues). It is interpreted differently between professional groups and underlying theoretical frameworks (DCP, 2011).

Theories and Models. As Johnstone and Dallos (2014b) point out, these theoretical frameworks differ regarding terminology (e.g. "reformulation" (Ryle & Kerr, 2002); "dynamic formulation" (Malan, 1979); and "case conceptualisation" (Beck, 1995)) and how they develop, communicate, and use formulation. They vary in their perspectives on the importance of reflexivity, diagnosis, "utility" versus "truth" of formulation, and collaborative versus expert stance; elements they view as most important (e.g. social, physiological, behavioural, emotional, or cognitive); and theoretical constructs they employ (e.g. narratives, the unconscious, or core beliefs (Johnstone & Dallos, 2014b). Cognitive-behavioural therapy (CBT), for example, emphasises evidence-based and collaborative development of formulation, using concepts like safety-seeking behaviours, beliefs, and conditional rules and assumptions to describe onset and maintenance cycles of problems (Dudley & Kuyken, 2014; Kuyken, Padesky et al., 2009). Conversely, psychodynamic formulation frames difficulties and symptoms as expressing underlying orders of meaning in clients' emotional lives, arising from often unconscious conflicting relationships, feelings, desires, and fears (Leiper, 2014). Systemic formulation places the problem within relational processes rather than within individuals and aims to explore meanings system members hold about these issues (Dallos & Draper, 2010; Dallos & Stedmon, 2014). Sequential diagrammatic reformulation (SDR) in Cognitive Analytic Therapy (CAT) focuses on transference and counter-transference within reciprocal roles, understood as originating from early relationships (Ryle & Kerr, 2002; Shine & Westacott, 2010; see Johnstone and Dallos, 2014a, for review of approaches).

Components and Purpose. Notwithstanding these differences, there are core formulation components across these frameworks. They all summarise patients' difficulties; draw on theory to propose how they relate; explain onset and maintenance; indicate intervention plans; and are open to review (DCP, 2011; Johnstone & Dallos, 2014b). Kuyken (2006) further described these processes requiring "balanced synthesis of intuitive and rational cognitive systems" (p.30). On the one hand, formulation involves "artistry": critical appraisal of one's experience, adaptability, and intuitiveness (corresponding with the reflective-practitioner model). On the other, it involves drawing on psychological research and/or theory (corresponding with the scientist-practitioner model).

Formulation: The Evidence-Base

Considering formulation's roots within the scientist-practitioner model, the abundance of formulation frameworks, and theoretical acceptance of formulation's importance in psychology and mental healthcare generally, there is surprising paucity of research (Godoy & Haynes, 2011; Halpin, Kugathasan et al., 2016). Although various books on formulation have been published since 1989 (e.g. Bruch & Bond, 1998; Corrie & Lane, 2010; Corrie, Townend et al., 2015; Eells, 2007; Hallam, 2013; Ingram, 2006; Johnstone & Dallos, 2014a; Kuyken et al., 2009; Nezu, Nezu et al., 2004; Persons, 1989;

Sturmey, 2009; Tarrier & Johnson, 2016; Weerasekera, 1996) and it is intuitively seen as essential to effective treatment, there is little empirical evaluation of its distinct contribution (Christofides, Johnstone et al., 2012; Halpin et al., 2016; Redhead et al., 2015). Some researchers propose clinicians' trust in formulation as a way of attaining better outcomes may be misguided as manualised interventions often perform at least as well as formulation-based interventions (Persons & Hong, 2016). Others doubt formulation on the basis of accuracy, stating it is always founded on potentially flawed professional judgment (Corrie & Lane, 2010).

One reason for the lack of research is difficulties quantifying formulation due to its transitory and hypothetical nature (Redhead et al., 2015). However, some attempts at empirical evaluation of formulation have been made despite claims it cannot be subjected to research (Bruch & Bond, 1998). These attempts can be classified as "top-down" or "bottom-up" (Bieling & Kuyken, 2003). The former relates to evidence for the theories and models formulations are based upon (i.e. generalisation from theory to individual cases; Mumma, 2011). "Top-down" evidence is better established, particularly for certain approaches (e.g. CBT; Thew & Krohnert, 2015). There is also much evidence for the efficacy of many of the interventions they inform (e.g. Leigh-Hunt & Perry, 2015; Mayo-Wilson, Dias et al., 2014). "Bottom-up" evidence, which is lacking, refers to more specific criteria, including: outcome (e.g. symptom improvement), validity (i.e. concordance with client experiences, standardised measures, and clinical impressions), reliability (i.e. clinician agreement), and acceptability (i.e. whether it is experienced as useful; Mumma, 2011).

Eight reviews of the narrative literature and quantitative evidence-base have been conducted. One reviewed formulation-guided versus protocol-guided CBT (Persons & Hong, 2016); one focused on reliability (Flinn, Braham et al., 2015); one on efficacy (Aston, 2009); one on validity (Mumma, 2011); one on efficacy, reliability, validity, process, function, and training requirements (Rainforth & Laurenson, 2014); and three provided more general, narrative overviews (Bieling & Kuyken, 2003; Kuyken, 2006; Kuyken, Padesky et al., 2008). Most could not make firm conclusions due to paucity of research, variable methods, and study limitations (Flinn et al., 2015). Only two used systematic literature searches (Flinn et al., 2015; Rainforth & Laurenson, 2014).

Rationale

Although the quantitative evidence-base has been reviewed, there is no thorough review of the existing qualitative literature nor of the experience of formulation. Exclusion of qualitative research from reviews and evidence-based practice omits vital information: considering how little research exists regarding formulation, it is important all relevant studies – including those using qualitative methodologies – are reviewed using a comprehensive and coherent approach (Toye, Seers et al., 2013). Some propose it is not possible to fully comprehend how any part of mental health treatment, including formulation, enables change without exploring the experiences of those who receive or facilitate it (Hodgetts & Wright, 2007; Shine & Westacott, 2010). Indeed, patient views can differ from therapists'

and predict outcome (Harper & Moss, 2003). Qualitative synthesis is also timely considering publication of several new qualitative studies within the past few years, and the increasing pressure on mental healthcare professionals to demonstrate the value of their skills (including formulation; Christofides et al., 2012).

Aims

The current review aims to:

- Systematically find, synthesise, and critique qualitative research on the experience of psychological formulation according to patients and clinicians
- Use meta-ethnography to develop an interpretative conceptual model of existing literature to provide a better overview for patients, healthcare professionals, and policy makers within mental healthcare
- Make recommendations to improve practice and guide further research.

Method

Design

After careful deliberation following relevant guidance (Booth, Noyes et al., 2016; Campbell, Pound et al., 2011; Dixon-Woods, Agarwal et al., 2005; Noyes & Lewin, 2011b) and discussion with the research team, meta-ethnography was deemed most suitable design because:

- it addresses the review aims, including to go beyond summarising to developing hypotheses (i.e. be interpretative). It may thereby update current understandings of formulation, promote relevance of results from separate qualitative papers to a wider context, and determine directions for further research (France, Wells et al., 2016);
- it was designed in response to the possibilities and challenges of synthesising a small number of monographs; this fit the relatively small number (n=17) found here (Toye et al., 2013);
- it is devised to be used with primary studies providing thick description, like most studies included here;
- it is becoming one of the most common approaches to providing robust overviews of patient and clinician beliefs, experiences, and understandings of phenomena within healthcare, including by the Cochrane Collaboration (Atkins, Lewin et al., 2008; Noyes, Popay et al., 2008), World Health Organisation (Waters, 2009), and National Institute for Health Research (Toye et al., 2013).

Due to its meta-ethnographic approach, the review takes an interpretative and idealist (i.e. knowledge as subjective) stance. Noblit & Hare's (1988) original seven phases of meta-ethnography are enacted differently by different authors (see Lee and colleagues, 2015, for a review). The current meta-synthesis operationalised the steps based on recent examples within healthcare research, for example by including systematic search and quality appraisal (Campbell, Pound et al., 2003; Malpass,

Carel et al., 2012; Malpass, Shaw et al., 2009; Rushbrooke, Murray et al., 2014; Toye et al., 2013; see Figure 1).

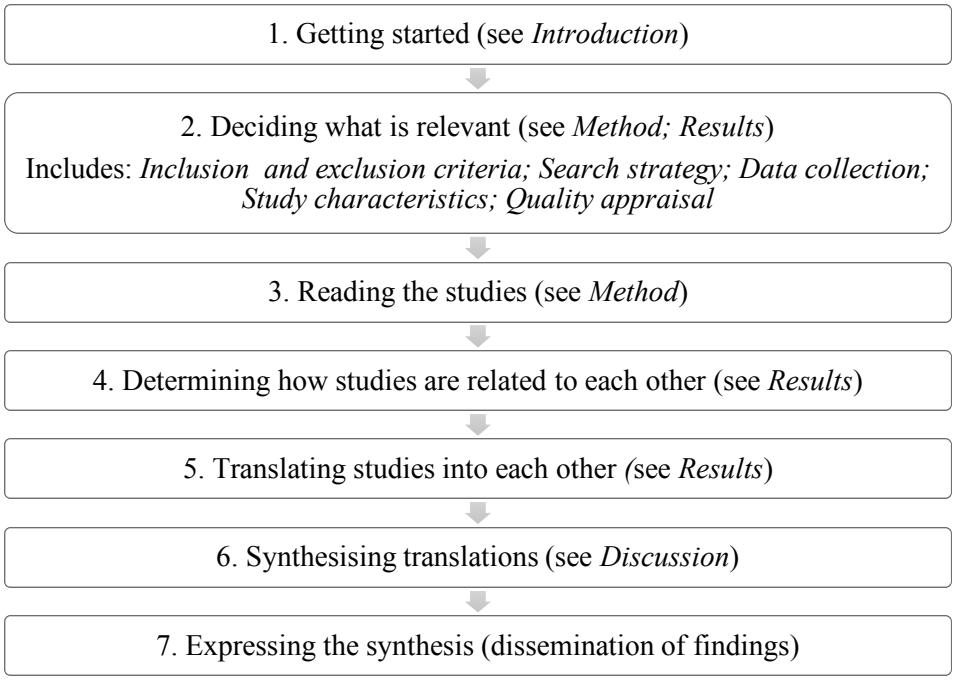

Figure 1. Seven phases of meta-ethnography as applied to current review (adapted from Toye et al., 2013)

Rigour. Debate exists concerning application of concepts like validity and reliability to qualitative research and, if applied, how to assess such concepts. The current review will attempt to demonstrate rigour by following Lincoln and Guba's (1985) translation of quantitative to qualitative criteria as recommended by the Cochrane Collaboration (Hannes, 2011; Table 1).

Table 1

Qualitative Criteria of Rigour (Adapted from Hannes, 2011)

Aspect	Qualitative term (quantitative term)	How applied in current literature review
Truth value	Credibility (internal validity)	• Attention to negative cases (see *Results*) • Verbatim quotes (see *Results*)
Applicability	Transferability (external validity or generalizability)	• Providing details of study participants and demographics (see *Study characteristics*) • Providing contextual background information (see *Study characteristics*)
Consistency	Dependability (reliability)	• Peer review and debriefing (with supervisors) regarding each methodological decision made
Neutrality	Confirmability (objectivity)	• Assessing the effects of the researcher during all steps of the research process, including researcher's background, education, perspective, and school of thought (see *Reflexivity*)

1. Getting Started

The first phase involves choosing a synthesis-worthy topic and developing a research question. The current topic was identified through the researcher's interest in and practice of formulation, conducting scoping searches, reading relevant studies, and discussion with the research team. The research question and its worthiness (rationale) have already been described (see *Introduction)*.

2. Deciding Relevance

Debate exists concerning whether searches in qualitative syntheses need to be exhaustive and systematic (Toye et al., 2013). A systematic search was completed here to increase transparency and robustness, corresponding with Cochrane (Atkins et al., 2008) and WHO recommendations (Waters, 2009).

Inclusion and exclusion criteria. A multitude of qualitative approaches and contextual outcomes were included due to limited research (see Table 2).

Table 2

Inclusion and exclusion criteria

	Inclusion	Exclusion
Types of studies	Using any qualitative (i.e. text-based and interpretive) method of data collection and analysis Published in or translated to English or Dutch (due to the lead author's proficiency in both)	Descriptive papers, editorials, opinion papers, narratives, case studies, systematic or other qualitative reviews, and studies using quantitative methods of data collection and analysis Conference abstracts (not enough information available to meaningfully draw conclusions and integrate study findings)
Types of participants	Any individuals with mental health difficulties and/or mental health professionals	Study included only individuals without mental health difficulties, or could not distinguish findings between those with and without mental health issues Study included only non-mental health professionals
Types of formulations	Any type of psychological or psychosocial formulation from any theoretical orientation (e.g. including CBT, CAT)	Other types of formulations (e.g. medical case conceptualisations)
Types of outcome	Focus on contextual outcomes, including: attitudes to, beliefs about, knowledge, experience, understanding, and perception of formulation, including regarding facilitators, barriers, and professional practice	Findings did not focus on contextual outcomes on left (e.g. experience of formulation was only one theme in paper)

Search strategy. The search strategy developed iteratively. Search terms were identified by noting common text words and subject terms authors and/or indexes applied to relevant articles, and exploring mapped search terms within databases (e.g. PubMed's MeSH; Embase's Emtree).

Electronic resources. Four electronic databases, chosen in consultation with the University of Bath's subject librarian and research team, were searched on 18th April 2017: Embase, SCOPUS, PsycINFO, and PubMed. No restrictions were put in place regarding publication year. Search strings comprised two components, identifying papers: 1) on formulation, and 2) using qualitative methodology (Table 3). Search terms for the first component included synonymous words or phrases for "formulation" and used wildcard operators (*) where appropriate to minimise risk of missing relevant material. For the second component, balance between sensitivity (i.e. proportion of relevant articles retrieved) and specificity (i.e. proportion of irrelevant articles not retrieved) was sought based on "optimal" qualitative research search strings by Booth (2016).

Table 3

Search Terms Per Database

Database	Search terms: Formulation	Search terms: Qualitative research (based on Booth, 2016)
Embase	'psych* formulat*' OR 'case conceptuali*' OR 'idiographic assessment' OR 'person-specific validation' OR 'case formulat*'	interview OR 'health care organization'/exp OR experiences
SCOPUS	"psych* formulat*" OR "case formulat*" OR "case conceptuali*" OR "idiographic assessment" OR "person-specific validation"	"qualitative" OR "interview*"
PsycINFO	"person-specific validation" OR "idiographic assessment" OR "case conceptuali*" OR "case formulat*" OR "psych* formulat*"	"interview" OR "qualitative"
PubMed	idiographic assessment OR case conceptuali* OR case formulat* OR psychotherapeutic formulat* OR psychological formulat* OR psychiatric formulat*	interview* OR interviews OR experience* OR qualitative

Search terms in each component were run using the Boolean operator OR and then run together using AND to ensure resulting studies included a term from each category. Search strategies were individualised for each database in consultation with the subject librarian and research team to ensure the most effective searches. They were performed systematically in each database (see Table 4 for report of strategy).

Grey literature. Grey literature was explored as part of the electronic searches described above; no separate grey literature databases were searched.

Hand-searching. Reference lists of the aforementioned reviews (see p.15) and each identified study were iteratively hand-searched to find further studies and unpublished research until no new studies were found.

Table 4

STARLITE Standardised Report of Current Qualitative Synthesis (Adapted from Booth et al., 2011)

STARLITE category	Details
Sampling strategy	Comprehensive: attempts to identify all relevant studies on the topic
Type of study	Any type of qualitative study (includes ethnographic, grounded theory, thematic analysis, focus groups, etc.)
Approaches	Subject searching, citation snowballing, Internet searching
Range of years	No restrictions: to the beginning of each candidate database to 18th April 2017
Limits	English or Dutch language, human, journal articles or dissertations
Inclusion and exclusions	Inclusion: qualitative method, about psychological formulation; exclusion: quantitative method (see Table 2 for details)
Terms used	See Table 3
Electronic sources	EMBASE, Scopus, PsycINFO, PubMed (no generalised search platforms used, e.g. Ovid)

Data collection and analysis.

Study selection. The electronic search yielded 511 articles, imported into Endnote. Following removal of 157 duplicates, titles and abstracts of the remaining 354 studies were screened for eligibility based on inclusion criteria. After 302 were excluded, the 52 remaining studies were screened in full to assess further eligibility. Eight articles met inclusion criteria and nine more were found by hand-searching reference lists, yielding 17 studies (see Figure 2).

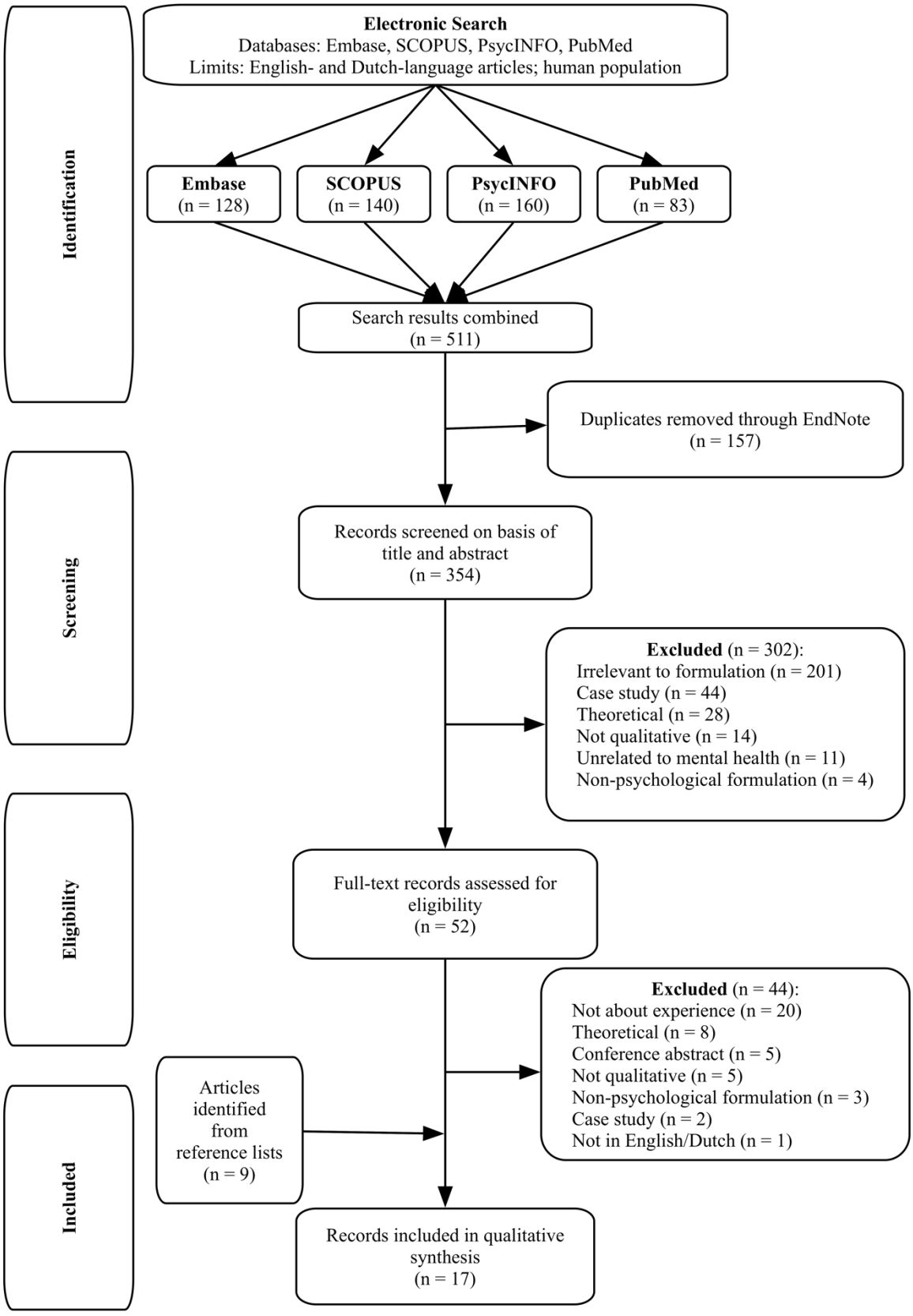

Figure 2. Search process flow diagram (based on PRISMA recommendations; Moher, Liberati et al., 2009)

Data extraction and management. Corresponding with meta-ethnography, an inclusive approach to data extraction was taken (versus a selective approach, or using theoretical framework to guide extraction; Noyes & Lewin, 2011a). Although inclusive approaches are more resource-intensive and might make it harder to judge theme validity, the review's aimed to avoid omitting findings of potential value and thus be as inclusive as possible (Noyes & Lewin, 2011a). All contextual and methodological information, themes, author's interpretations, and other qualitative data identified in primary studies and relevant to review question(s) were therefore extracted. Data extraction was performed separately from quality assessment as these require examining studies with different lenses. Data was entered into a table, then organised and numbered alphabetically by lead author name (see Appendix B).

Quality appraisal. Quality appraisal instruments for qualitative research differ in their criteria and how they are intended to be used, partly due to varied philosophies on whether and how the concept of bias can be applied to qualitative research (Dixon-Woods et al., 2005). Some deem these tools crucial to exploration and interpretation and propose "weak" studies should be excluded (Campbell et al., 2003). Others argue they are reductionist and suppress interpretation (Sandelowski, Docherty et al., 1997). These tools may not have higher agreement rates than unprompted judgment and do not include factors of idiosyncratic importance (e.g. in this case, detail regarding formulation; Dixon-Woods et al., 2005). Other researchers seek balance between appraisal of methodological flaws and consideration of insights and findings. A quality appraisal instrument was used here to increase transparency and allow some differentiation between constructs in relation to study quality. It did not exclude studies based on their quality to prevent overlooking valuable insights.

The Critical Appraisal Skills Programme's (CASP, 2017) qualitative appraisal tool was chosen (Appendix C). CASP is recommended by leading authorities in qualitative synthesis due to its comprehensiveness and ease of use, including the Cochrane Collaboration (Hannes, 2011). It is the commonest tool in previous healthcare meta-ethnographies, which favourably compared it to other quality frameworks (Malpass et al., 2012; Toye et al., 2013). CASP does not include a scoring system because it was designed as pedagogic tool. Based on scoring systems developed by previous meta-syntheses, a five-point Likert scale was created with anchoring points at zero (no: criterion not met), one (criterion partially met or unclear), and two (yes: criterion met and extensively explained). Only the qualitative parts of mixed method papers (e.g. Chadwick, Williams et al., 2003) were appraised. Quality appraisal was conducted separately after data extraction.

Sensitivity analysis. Due to continuing lack of universality regarding what constitutes high (HQ) and low quality (LQ) papers, sensitivity analysis was conducted here by ranking papers according to CASP scores and assessing their relative contributions after synthesis rather than excluding papers beforehand (Malpass et al., 2009; Thomas & Harden, 2008; Toye et al., 2013).

3. Reading the Studies

"Reading" refers to becoming as familiar as possible with included studies (Atkins et al., 2008). Although described as distinct phase, reading and rereading is undertaken throughout meta-ethnography with different intentions at different time-points (see Table 5).

Table 5

*Reading and Rereading of Studies**

Reading phase	Purpose
1	Full-text screening for eligibility
2	Full papers for data extraction
3	Full papers for quality appraisal
4	Full papers for identifying first- and second-order constructs
5	Second-order constructs table to note further reflections
6	Full papers to check for any missing relevant data
7	Second-order constructs table to draw together translations
8	Translations to create conceptual model
9	Conceptual model to create "final line of argument"

Note. * This does not include reading of some of the study accounts during the "Getting Started" phase.

One purpose is identifying and describing first-, second-, and third-order constructs. Definitions of these constructs vary between meta-ethnographies. For example, some identify second-order constructs as the themes identified by the original researchers, whilst others define these as conclusions drawn by the authors (Atkins et al., 2008; Lee et al., 2015; Toye et al., 2013). The current meta-ethnography was guided by aforementioned healthcare examples (see Figure 3).

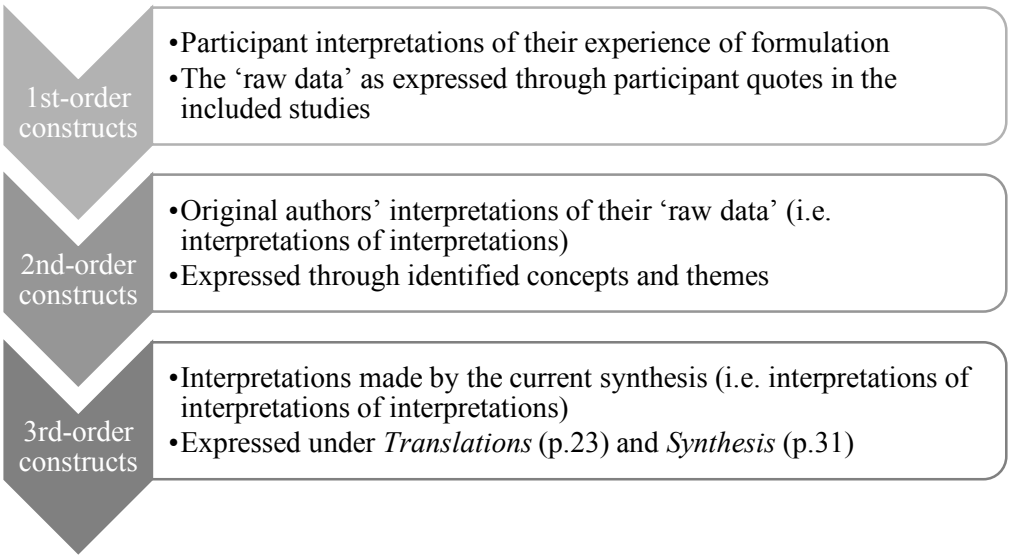

Figure 3. Definitions of first-, second-, and third-order constructs (as adapted from Malpass et al., 2009)

Reflexivity. The lead author is a 30-year-old, female Trainee Clinical Psychologist from mixed Euro-Asian ethnicity. She was raised in several European countries and consequently has predominantly Western perspectives. She has several years' experience of formulation using various theoretical frameworks (although predominantly cognitive-behavioural and systemic) with various client groups, who have responded in different ways (e.g. some finding it more and some less useful). She believes formulation can be useful to clients and clinicians, but many may not experience this. She is interested in improving mental healthcare and addressing the research gap on formulation. She has had more experience with quantitative systematic reviews, but believes it is suitable and feasible to synthesise qualitative studies whilst recognising assumptions and challenges in doing so. She believes qualitative studies can improve understanding of how clients and clinicians experience formulation (Ring, Ritchie et al., 2010).

Results

Study Characteristics

Study characteristics were extracted following another reading (see Appendix B table).

Designs. Most (n=13) studies named their qualitative analytic approach, although only two of the five mixed method studies specified theirs. Thematic analysis was most common (n=5), followed by interpretative phenomenological analysis (n=4), grounded theory (n=2), content analysis (n=2), and template analysis (n=1). One study used both content and template analysis (Wainwright & Bergin, 2010). All studies, with two exceptions, used semi-structured individual interviews to collect their data. One study used a small-scale retrospective survey with open-ended questions (Hollingsworth & Johnstone, 2014). Another used a focus group to collect data on how clients engaged with, used and were affected by formulations (Picken & Cogan, 2012).

Sample sizes and methods. A total of 199 participants are included: 94 patients and 105 staff. Sample sizes ranged from four (Evans & Parry, 1996) to 25 (Summers, 2006), with a mean of 11 (note only participants in the qualitative parts of mixed methodology studies were counted). More studies reported using or appeared to use purposive sampling (i.e. selecting specific participants; n=10) than opportunistic (i.e. unguided selection according to convenience; n=6); it was not possible to establish one study's sampling technique (Leeming, Boyle et al., 2009).

Settings. Settings were unclear for five studies. The remaining twelve recruited from: adult mental health services (n=4), early intervention/psychosis services (n=3), older adult services (n=3), inpatient settings (n=3), primary care services (n=2), child and adolescent mental health service (n=1), high-dependency rehabilitation service (n=1), and user group regarding stigma (n=1). Nearly all studies either reported (n=10) or appeared (n=6) to have been conducted within the UK, based on author contact details and terminology used; one was conducted in Melbourne, Australia (Halpin et al., 2016).

Participants. Ten studies reported SU age ranges, ranging from 15-89 years. One study reported mean SU age of 31.5 (Chadwick et al., 2003). No studies reported staff participant age. Most papers reporting participant gender had more female than male participants (n=8), with one including only females (Halpin et al., 2016); only three studies included more males (Cairns, Reid et al., 2015; Chadwick et al., 2003; Pain, Chadwick et al., 2008). Six studies described patient ethnicity, predominantly White-British. One study reported including ethnically "diverse" staff (Mohtashemi, Stevens et al., 2016); one included one mixed White/Black African SU (Cairns et al., 2015); and one included one Asian-British and one Asian-Other SU (Kahlon, Neal et al., 2014). Only eight papers reported on participants' mental health symptomatology, including of psychosis (n=4), depression (n=3), and anxiety (n=2). Some vaguely described mental health conditions (n=4) whilst others listed clear inclusion criteria regarding diagnosis (e.g. relating to a DSM or questionnaire score threshold; n=5). 15 studies reported on staff professional roles: seven on staff participants, and 13 on staff who were not participants but who conducted the formulations. Staff participants had various professional backgrounds, including clinical psychologists, counsellors, counselling psychologists, drama therapists, health care assistants (HCAs), nurses, occupational therapists (OTs), psychiatrists, qualified therapists, social workers, and support workers. Some studies reported years of staff professional experience and years of working within the service setting.

Contextual outcomes. All included papers explored formulation, with diverse objectives. For most studies this included evaluating patient and/or staff experience of formulation, with some aiming to explore specific views on its relevance, helpfulness, utility, impact, benefits, and barriers; how it affected or informed therapy and patients' difficulties and daily life; perceptions of formulation purpose and underlying theoretical models; and opinions on changes to be made and what participants had learned.

Types of formulations. Two papers did not refer to the underlying theoretical frameworks of formulations their participants experienced, and four described using eclectic/integrative approaches (i.e. mixing various frameworks; Christofides et al., 2012; Hollingsworth & Johnstone, 2014) or "psychosocial formulation" (Cairns et al., 2015; Leeming et al., 2009). Of papers reporting underlying theory, CBT was most common (n=8; including two specifying using a 5p framework), followed by CAT (n=3), and object relations (n=1). Papers either did not describe how formulations were developed or communicated (n=6), or reported using a mixture of three methods (verbal, diagrammatic, and written prose).

Study Quality

Quality criteria. Quality was appraised using CASP (2017) following a third reading. A minimum score of zero and maximum score of two were achievable for each of the ten criteria. As Table 6 illustrates, mean score per criteria ranged from 0.79 to 1.94. Criterion two was highest-rated (qualitative method was appropriate; M=1.94), followed by criterion one (clear aims; M=1.79) and ten (research value; M=1.62). Criterion six was lowest-rated (researcher reflexivity; M=0.79), followed by criterion seven (ethics; M=1.15) and eight (data analysis rigour; M=1.26). Eight studies (most mixed method) did not consider researcher reflexivity, despite this generally considered essential in qualitative research (Braun & Clarke, 2006). Five did not describe ethical issues (including ethical approval). Data analysis rigour often lost points due to not naming the qualitative analytic approach used (n=4) or failing to describe analysis in sufficient detail. Omission of these factors does not necessarily imply these were not considered, merely that they were not reported.

Overall quality level. A minimum score of zero and maximum of 20 could be attained for overall quality. The overall quality of studies here ranged from 4.5 (Chadwick et al., 2003) to 20 (Hamill, Ried et al., 2008), with a mean of 14.26 (see Figure 4). "HQ" was defined as being above the average of 14.26, following descriptive analysis using SPSS and examination of papers at the 25th, 50th, and 75th percentiles. The review thus includes nine HQ papers (denoted in **bold** throughout discussion of third-order constructs below) and eight LQ papers. There were more HQ papers regarding SU views (seven of ten papers; 70%), than staff views of formulation with SUs (two of four papers; 50%) and staff views of formulation with colleagues (two of six papers; 33%). No fixed parameters exist to determine weight of qualitative studies based on quality appraisal. Corresponding with previous meta-syntheses, LQ studies were not excluded because of the value of their content. Sensitivity analysis was conducted after the meta-ethnographic process to consider the pattern of HQ to LQ papers in relation to third-order themes (see Sensitivity Analysis).

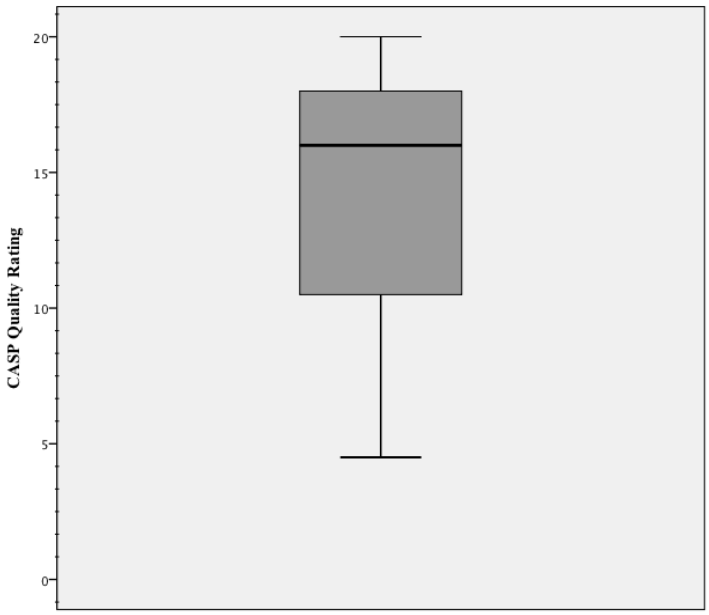

Figure 4. Boxplot of CASP quality ratings across studies, showing the 25th, 50th (average), and 75th percentiles

Table 6

*Quality of Included Studies Using CASP (2017) Checklist**

Study/criterion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Mean
1: Clear aims	2	0.5	2	2	1.5	2	2	2	2	1	2	2	2	2	2	2	1.5	1.79
2: Qualitative methodology appropriate	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.94
3: Appropriate research design	2	0	2	2	1.5	2	2	0	1	0.5	1.5	2	2	2	2	1.5	1	1.47
4: Appropriate recruitment strategy	1	0.5	2	1.5	1.5	1	2	2	1	0.5	1	1.5	1.5	2	2	2	1	1.41
5: Data collection considered	1.5	0.5	2	1.5	1	1	2	1.5	1.5	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1.35
6: Researcher-participant relationships considered	1.5	0	1.5	0	0	1	2	0	1.5	0	2	0	0	1.5	2	0	0.5	0.79
7: Ethical issues considered	2	1	1.5	1	0.5	1.5	2	0	2	0	2	2	0	2	2	0	0	1.15
8: Data analysis rigour	2	0	2	1	0	2	2	0.5	2	1	2	1.5	1	1	1	1.5	1	1.26
9: Statement of findings	2	0.5	2	1	0.5	1.5	2	0.5	2	1	2	1.5	1	2	2	1.5	1.5	1.44
10: Research value	2	0	1.5	1	1	2	2	1.5	2	1.5	2	2	2	2	2	2	1	1.62
Total	18	4	18.5	13	9.5	16	20	10	17	8	18	16	13	18	18.5	14	10.5	14.24
Quality rating (HQ/LQ)**	HQ	LQ	HQ	LQ	LQ	HQ	HQ	LQ	HQ	LQ	HQ	HQ	LQ	HQ	HQ	LQ	LQ	

Note. *5-point Likert scale used with following anchors: 0 = no; 1 = partially / unclear; 2 = yes. **HQ = high quality; LQ = low quality

Key: 1 (Cairns, Reid et al., 2015); 2 (Chadwick, Williams et al., 2003); 3 (Christofides, Johnstone et al., 2012); 4 (Craven-Staines, Dexter-Smith et al., 2010); 5 (Evans & Parry, 1996); 6 (Halpin, Kugathasan et al., 2016); 7 (Hamill, Ried et al., 2008); 8 (Hollingsworth & Johnstone, 2014); 9 (Kahlon, Neal et al., 2014); 10 (Leeming, Boyle et al., 2009); 11 (Mohtashemi, Stevens et al., 2016); 12 (Pain, Chadwick et al., 2008); 13 (Picken & Cogan, 2012); 14 (Redhead, Johnstone et al., 2015); 15 (Shine & Westacott, 2010); 16 (Summers, 2006); 17 (Wainwright & Bergin, 2010)

4. Determining How Studies Are Related To Each Other

After data extraction and quality appraisal, papers were read a fourth time to identify second-order constructs relevant to the research question. These were entered into column one of the second-order constructs table (see Appendix D). Sentences, phrases, or quotes (i.e. first-order constructs) related to these second-order constructs were then extracted and entered into column two (Rushbrooke et al., 2014). Summary definitions of each second-order construct are given in column three, using terminology of original papers to preserve original meaning. Finally, notes of ideas were written into column four, which fed into development of third-order constructs (Malpass et al., 2009). Studies were initially read and grouped as follows:

1) SU views (n=10);

2) Staff views of formulation with SUs (n=4), and;

3) Staff views of formulation with colleagues, including team formulation (n=6).

5. Translating Studies Into Each Other: Developing the Conceptual Categories

The second-order construct table (Appendix D*)* was used to translate studies into each other (i.e. guide third-order construct development). It was reread for further ideas regarding translation and synthesis once all data was entered, including to identify repeated, related, or contradicting (refutational) concepts. Papers were then re-read to check for missing relevant data, before a final rereading of all constructs and notes in the table to consider how well they captured the original constructs in each paper (Rushbrooke et al., 2014). Final third-order translations of all second-order constructs were made across studies through discussion with the research team, representing the views and interpretations of the current synthesis. Table 7 provides a description (i.e. narrative translation) of each second-order construct that has meaning for all studies from which it is drawn (Malpass et al., 2012). Initially, second-order constructs for each category above were kept separate so variation could be explored. It became clear second-order constructs were repeating across the data and did not diverge between categories (Toye et al., 2013). Discussion with the research team led to analysis of these categories together for synthesis.

Third-order translations were organised into four core themes, each with two to four subthemes. Core themes include: (1) “Function of formulation” at a formulation-level; (2) “Intra-connection: Connecting with the self”’ at individual- or micro-level; (3) “Inter-connection: Connecting with others” at relationship- or meso-level; and (4) “Wider context” at systems- or macro-level (see Table 7).

Table 7

Third-Order Translations

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
	Core Theme 1 – Function of formulation			
1.1 "Shaping the experience": Guiding therapeutic intervention and care plans	Formulation provided a focus for and continuity within therapy by framing it from beginning to end. It helped clinicians be responsive to service users' needs, be flexible, and allow therapy to be shaped in the most meaningful manner. Breaking difficulties into component parts helped make them feel more manageable and helped SUs reflect on goals. At the end of therapy, it offered a means to reflect on the therapy experience. Some SUs compared the formulation-guided therapy they were being interviewed about with previous experience(s) of therapy, describing the former as enabling more forward moving than unstructured/unguided therapy.	Formulation helped organise clinicians' thoughts during the dynamic and evolving process of therapy. It enabled clinicians to judge which therapeutic approach was appropriate and to maintain adherence to the model they chose.	Formulation helped staff generate new ideas about working with patients, guiding the development of individualised interventions and care plans, encouraging regular monitoring of these plans, and improving risk management. Formulation was thus described by most as having a positive overall impact on quality of care. It was perceived as particularly useful when working with complexity. When care plans did not incorporate formulations, they were based on diagnosis and heuristics rather than individual presentations and were generally seen as less meaningful.	**1**, 5, **7,** 14 2, 13 4, 8, 16, 17 (2 HQ, 8 LQ)
1.2 Formulation as a tangible tool or intervention in itself	Formulation acted as an intervention in itself by offering space to talk about difficulties with an impartial other. It encouraged a reflective stance that enabled SUs to hear their story in a less critical and judgmental way. If encapsulated diagrammatically or through prose, it provided a lasting, tangible reality and literal perspective or distance from problems. It could thus be used as a tool or coping strategy by enabling revisiting outside of therapy to help remember, recognise, and revise problems (it was also used as a communication tool – see 3.2-*Singing off the same hymn sheet*). Sensory aspects of formulation letters also appeared important to many participants. However, some SUs chose not to think about or use their formulation again, viewing it as not representing anything lasting but as only one, current impression.	Formulation was described as powerful and akin to undertaking an intervention.	Formulation acted as an intervention for colleagues. It provided a reflective space ("time out") for staff to think creatively, with a chance to talk without an illness or management focus, to discuss ideas, make links to theory and allow new things to emerge.	**1, 12, 15** **6** 16+ (4 HQ, 1 LQ)

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
Core Theme 2 – Intra-connection: Connecting with self				
2.1 Insight and understanding	Formulation can increase self-awareness and aid SU understanding of themselves, including their problems and what they might be able to improve. It can help visualise links (including between past difficulties and present distress), identify previously unacknowledged factors and patterns of behaviour, and make difficulties seem real – especially if drawn or written out. It often provides the first opportunity to explore early life experiences, make links between past and present, and become aware of triggers and maintaining factors of problems. Some SUs indicated wanting to spend more time on the present in particular. Formulation also enabled SUs to make sense of their difficulties as reasonable, understandable, and "normal". Lack of visual and verbal clarity were highlighted as impeding understanding. SUs also stated that formulation enhanced the therapist's understanding of them, and that it helped the therapist demonstrate to them that they understood (vital to trust; see *Working together* below).	Formulation increased clinicians' insight into and understanding of client's problems through an exploratory process that enables connections to be made between past and present. It allowed therapists to see participants on a deeper level.	Formulation with staff developed their knowledge and understanding of SUs' problems and provided reasons for their behaviour. It promoted sense-making and allowed staff to take a deeper and more complex look at SUs. By encouraging reflective skills, it also provided an understanding of their own emotional reactions and their own impact on the clinical work. It was seen as most beneficial when discussing clients described as challenging.	**1,** 2+, 5, **6+,** 10, **12, 14,** 15 2+, **6+** **3**, 4, 8, 17 (5 HQ, 7 LQ)
2.2 Emotional response	Four possible emotional responses to formulation by SUs were identified: positive, negative, mixed/ambivalent, or none/neutral. Positive emotions included feeling reassured, encouraged, optimistic, hopeful, gratitude, and relief. These emotions were attributed to an increased self-understanding, feeling understood by the therapist, and feeling more "normal" (see above). However, for some SUs this greater understanding led to negative emotions due to realising the impact of past events on current difficulties, feeling angry towards perpetrators, or recognising the role of their own behaviour in difficulties and losses. Negative emotions included feeling sad, irritated, angry, upset, worried, overwhelmed, exhausted, hopeless, and frightened. These emotions could be fleeting or lasting.		Hearing and discussing SUs' stories evoked strong emotion in some staff, although this differed between participants (with some not describing any emotional response).	**1,** 5, **6, 7, 9, 12, 15** - 17 (6 HQ, 2 LQ)

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
	They could lead to formulation being experienced as uncomfortable, to extremely challenging. They could also lead to dissociation and post-session exhaustion. Besides being caused by increased understanding, negative emotions were also described as occurring due to being reminded of painful memories that SUs had tried to blank off, approaching uncomfortable experiences, difficulties in processing the formulation, interpreting the formulation as having negative implications for one's identity (see *Identity*), or the therapist suggesting inaccurate formulations. The latter was described as particularly difficult if it happened during early stages of therapy. Some SUs felt able to address to discuss this and revise the formulation with the therapist, but most did not. Other SUs described feeling ambivalent and experiencing a mix of positive and negative emotions, whilst others stated they did not have an emotional response. Some described a change in emotions, and the ability to share these with the therapist, over time – generally from negative to mixed or positive (see *Change over time* below).			
2.3 Identity and roles	Formulation helped SUs rediscover lost identities and facilitate ongoing assimilation, awareness, and acceptance of the self, particularly if provided in a lasting document so that it could be revisited. Sometimes this was painful due to recognising their own role in difficulties and losses (see *Emotional response*). There was a contrasting view described of formulation not representing anything lasting, but only being one, current impression of identity and the self.	Formulation was described by clinical psychologists as a cornerstone of their profession and part of their professional identity.	Formulation with staff helped both facilitators and staff define their professional identities and roles – both for themselves and within their team. It was described by psychologists as a way to demonstrate their role experientially, which was easier to do than trying to explain this verbally.	**7, 9, 14,** 15 13 **3,** 4 (4 HQ, 3 LQ)
2.4 Moving forwards: Empowerment, confidence, and hope	Formulation (especially when experienced as collaborative and interactive) provided SUs with new perspectives and skills to cope with problems and respond to difficult situations. Formulation engendered a sense of ownership of the tools and therapy generally,	For therapists it was powerful and validating to have clients endorse the formulation, and helped increase their (i.e. therapist) hope regarding therapy. Therapists also described formulation enabling clients to	Formulation provided staff with individual satisfaction and a feeling that they could move forward and help SUs. Facilitators described using their expertise in formulation skills to facilitate/support staff to develop their own psychological understanding.	**9, 14, 15** 2, 13

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
	leading SUs to feel empowered, in control over problems, confident to move forwards, and anticipate improvement.	gain a sense of empowerment in understanding and dealing with presenting issues, by identifying client as "expert" in their own lived experience.		**3,** 16, 17 (4 HQ, 4 LQ)
Core Theme 3 – Inter-connection: Connecting with others				
3.1 Working together: The therapeutic alliance and team relationships	SUs related formulation to the therapeutic alliance in two ways. First, formulation helped SUs develop an awareness of the collaborative nature of the therapeutic relationship. SUs appreciated having therapist guidance and knowledge during formulation due to their mental health problems compromising their ability to comprehend their difficulties on their own. At the same time, the collaborative nature of formulation engendered a sense of ownership of the formulation and therapy generally. Second, when done well, formulation strengthened the therapeutic alliance. Formulation was described as an expression of the therapists' skill, professional experience, and competence as well as the therapists' respect, care, acceptance of, and commitment to the patient. Patients felt listened to and understood, which they contrasted with other people's attitudes towards their mental health problems. These factors helped engender trust in the therapist, boosted patients' motivation, enabled them to be more honest in therapy, and contributed to SUs viewing themselves in a less pathologising way. Many stated that it took time to develop both the formulation and the therapeutic alliance. When not done well, however, formulation could also have a negative impact on the therapeutic alliance – especially during early stages of therapy. Many patients felt unable to discuss this with their therapists, meaning there was no opportunity to address it.	Formulation helped increase the therapists' sense of alliance and collaboration with the SU. Formulation was also described as helpful in identifying or anticipating problems that may affect therapy and the reasons for them, including potential barriers in developing the therapeutic relationship or completing homework.	Formulation was described as helpful in developing shared team understanding, a consistent team approach, and improving the ability to work collaboratively both with patients and the rest of the team. Staff particularly highlighted the benefits of drawing on the knowledge and skills of different professionals, with no one taking an "expert" position. Participants also commented on valuing the formulation meetings specifically as a way to bring together people and ideas; combining different information and perspectives; leaving staff feeling valued, part of the team, or able to have their say. Facilitators described it as an effective use of time with a potentially wider impact than working with individual clients.	**6**$^{+}$**, 9, 12, 14, 15** 2, **6**$^{+}$**,** 13 **3,** 8, 16 (6 HQ, 3 LQ)
3.2 "Singing off the same	When SUs understood their formulation, it aided their communication skills by helping create a shared language	Formulation was seen by therapists as developing a shared understanding and language between them and	Formulation was seen as developing a unified understanding and shared language, which enabled	**1, 7, 14**

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
hymn sheet": Shared language and understanding	and understanding between them, their therapists, and other professionals involved in their care. Some SUs used their formulation diagrams or letters directly as tools with which to talk more openly about themselves with both personal and professional others. Some had also enjoyed showing these to people with similar problems and in order to give them advice. However, some described not wanting to discuss their formulation outside of therapy. For some SUs this was because they struggled to understand the formulation, which could also affect their ability to engage with the whole team. For others it was because allowing personal others to read formulations was perceived as risky. They felt that formulation could increase interpersonal problems (e.g. by contradicting others' views and leading to conflict) or could unfairly connect others with painful events (e.g. letters as potential weapons).	their clients. They also described it as a tangible communication tool used by their clients to engage in a process of meaning making and discuss difficulties with those in their social and professional support network. Others, however, stated that the intangible quality of formulation added to a complexity of using and sharing it with others.	communication with colleagues, patients, and external professionals. Factors that helped develop this shared language through formulation included good team work, integration of epistemological positions, and exploration of team dynamics. Written or diagrammatic formulation provided a particularly useful and tangible way of drawing together this information, documenting it, and disseminating it to others who may not have been present during the team formulation. Some facilitators of team meetings described how team formulations helped staff become more articulate and coherent regarding the theoretical underpinnings to their practice, whereby they were able to describe the model even if they were not always able to name it. Psychologists were described as playing a key role in facilitating this process. When successful, team formulation was seen by some staff as a better use of their time than individual work.	13 4, **11,** 17 (4 HQ, 3 LQ)
Core Theme 4 – Wider context				
4.1 "A joined-up 'package' of support": Fit with other parts of care and approaches	In one study, SUs described formulation as making a distinctive contribution to their overall support "package". They thus experienced formulation as a different, yet often complimentary part of a coherent biopsychosocial model. Some incorporated their formulation in other areas of support (e.g. by sharing this with other professionals), whilst others kept formulation separate due to experiencing it as upsetting. For example, some used formulations less than medical explanations or diagnoses. The latter appeared to offer some participants a stronger justification for and validation of their difficulties and gave them a much greater sense of relief. Conversely, others experienced diagnosis as implying something profoundly negative about themselves, whilst formulation enabled them to make sense of their difficulties as understandable and reasonable.	Several therapists considered whether formulation offers a full alternative to diagnosis, particularly in relation to service development due to the efficacy of formulation being difficult to measure and evaluate. Formulation was generally seen as a process of sense making that added "meat on the bones" of diagnosis: diagnosis as the framework and formulation as adding richness of detail. Formulation and diagnosis could thus work together. However, some therapists also described feeling a pressure to conform to the medical model, particularly when there was professional rivalry present or if psychology was seen as a threat (see *Barriers*).	Some staff described an unhelpful tension between psychological formulation on the one hand, and diagnosis and the medical model on the other. However, this was not present for all participants.	**1,** 10 13 **11**$^{+}$ (2 HQ, 2 LQ)

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
	Therapists were key in how formulation was or was not incorporated into an SU's overall support package. Therapists could help develop a sense of coherence between formulation and other parts of their care, which some participants described as aiding their overall understanding and sense of security. Many participants described how struggling to understand their formulation could impact their ability to engage with the whole team, whilst understanding it could aid communication skills.			
4.2 Barriers	Barriers to developing formulations presented in several forms to SUs. One barrier was the complicated nature of formulation, which could lead participants to feel surprised or confused. Some stated that being presented with example formulations may have helped. Another possible barrier was strong emotional response to formulation (see *Emotional response*), which could lead to difficulty engaging fully with its development as well as limit SUs' use of the formulation outside of therapy.	A lack of time to formulate within session or during short-term admission was described as the main barrier towards formulation by therapists. Other barriers included professional rivalry and feeling a pressure to conform to the medical model (both from colleagues and SUs).	The main barrier to formal formulation with staff was the amount of time and resources needed, both for conducting the actual formulation itself but also its preparation (i.e. gathering of relevant information). The development of formulation could also be impeded by staff not working as a team, to psychological formulations being seen as a threat to other professions, and a pressure to conform to a medical model. Other factors that could damage the development of psychological formulation included difficulty gaining an understanding of a SU's presentation, lack of staff agreement about what is important to include in the formulation, not feeling able to help, challenging behaviour by the SU, or encountering similar issues to a SU in their own personal life. These barriers could negatively impact staff's development of empathy and tolerance for SUs. Others described examples of unhelpful use of psychological formulation, for example when there was a lack of SU consent about sensitive material being shared and included in care plans. Some staff described formulations not being routinely included in care plans even though most agreed they should be. Barriers to this included staff not feeling involved in the process, a perception that formulation was tied to a particular role, and lack of education about what formulation is and how it may be helpful.	**1** **11**$^{+}$ 4, **11**$^{+}$**,** 17 (2 HQ, 2 LQ)
4.3 Formulation as	SUs discussed change over time in relation to two aforementioned dimensions. First, SUs described a	The understanding of formulation, and views regarding how necessary it is, was a development process for some	Staff described the impact of formulation as taking time and being an ongoing process.	**7, 9, 12, 14**

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
a journey: Change over time	change in therapeutic alliance. Many stated they did not feel initially able to trust the therapist and that the formulation stimulated a feeling of being exposed and of potential for the therapist to hurt them. The development of and revisiting the formulation over time, however, led to a stronger therapeutic alliance, increasing clients' comfort and their ability to contribute and share their feelings. Second, internal processes (i.e. emotional responses and beliefs regarding identity and capability) were described as requiring gradual assimilation. Emotional responses to formulation generally shifted from negative towards mixed or positive feelings and experiences (e.g. empowerment by being fully present, relief at understanding the reasons for their feelings, and revelation regarding having missed out on aspects of life). Positive change was not universal: some participants described a change for the worse (including therapeutic alliance and internal processes), whilst others described no change.	clinicians, contingent on their training and individual differences.		**11**[+] **3, 11**[+] (6 HQ)
4.4 Interpretation of formulation: "Convictions competing or shared uncertainty"	Formulation was interpreted as accurate, inaccurate/incomplete, or uncertain by SUs. Accuracy was important in helping SUs understand their problems as well as feel understood and accepted by their therapist. Some SUs felt able to discuss and revise inaccurate formulations, but most did not feel able to question their therapist.	Therapists expressed concerns about deciding when a formulation is "good enough" to guide therapeutic process. They described how the intangible quality of formulation can add to complexity in understanding, using and sharing formulations with clients and other professionals, questions regarding reliability and validity, and finding "best fit" for the client.	Individual and team culture differences could lead to different ways of responding to and interpreting formulation. Some viewed formulations as statements of fact, helpful through being "right" and leading to "correct" management. They valued a chance to get their views heard and disinclined to get "wrong" perspectives through reading "too deeply". For example, they felt that an overemphasis on the past could lead to it being used as an excuse. These individuals also tended to see speculative suggestions, incomplete information or, conversely, too much information as possibly leading to wrong views. Others valued being able to speculate and discuss ideas, seeing their own and others' views as provisional, and formulations as hypotheses. Participants could also differ in how necessary they believed formulations to be,	**12, 14** 13 **3, 11,** 16 (4 HQ, 2 LQ)

Third-order subthemes	Translation			Papers*
	Service user views (N=10)	Staff views: formulation with service users (N=4)	Staff views: formulation with colleagues (N=6)	
			although generally agreed that they may be particularly warranted in the face of complexity, high level of risk, and frequent service access.	

Sensitivity analysis. Three subthemes were derived from equal numbers of HQ and LQ papers (including: 2.4-*Moving forwards*; 4.1-*A joined-up package of support;* 4.2-*Barriers*). Two subthemes were obtained from more LQ than HQ papers (including 1.1-*Shaping the experience*; 2.1-*Insight and understanding*), whilst seven subthemes were from more HQ than LQ papers (including 1.2-*Tangible tool or intervention in itself*; 2.2-*Emotional response*; 2.3-*Identity and roles*; 3.1-*Working together*; 3.2-*Shared language and understanding*; 4.3-*Formulation as a journey*; 4.4-*Interpretation of formulation*). The three subthemes identified in the highest number of HQ papers were 2.2-*Emotional response*, 3.1-*Working together* and 4.3-*Formulation as a journey*. The latter themes may be stronger due to being developed from more rigorous studies, thus reflecting formulation experience more accurately. Overall theme pattern did not diverge between HQ and LQ papers.

Discussion

The current paper aimed to systematically find, synthesise, and critique qualitative research on the experience of psychological formulation by patients and clinicians. It also aimed to develop an interpretative conceptual model of the existing literature and make clinical and research recommendations; these are presented below using a "line of argument" approach.

6. Synthesising Translations: Final Line of Argument.

Noblit and Hare (1998) proposed three approaches for making sense of the translation process (i.e. synthesis): (1) refutational (i.e. findings are contradictory); (2) reciprocal (i.e. findings are directly comparable), and (3) findings are taken together and interpreted as "line of argument" (Toye et al., 2013). Since studies here evaluated varied aspects of formulation (i.e. from different participant groups and theoretical frameworks), a conceptual model was developed to establish a line of argument (Toye et al., 2013; Figure 5).

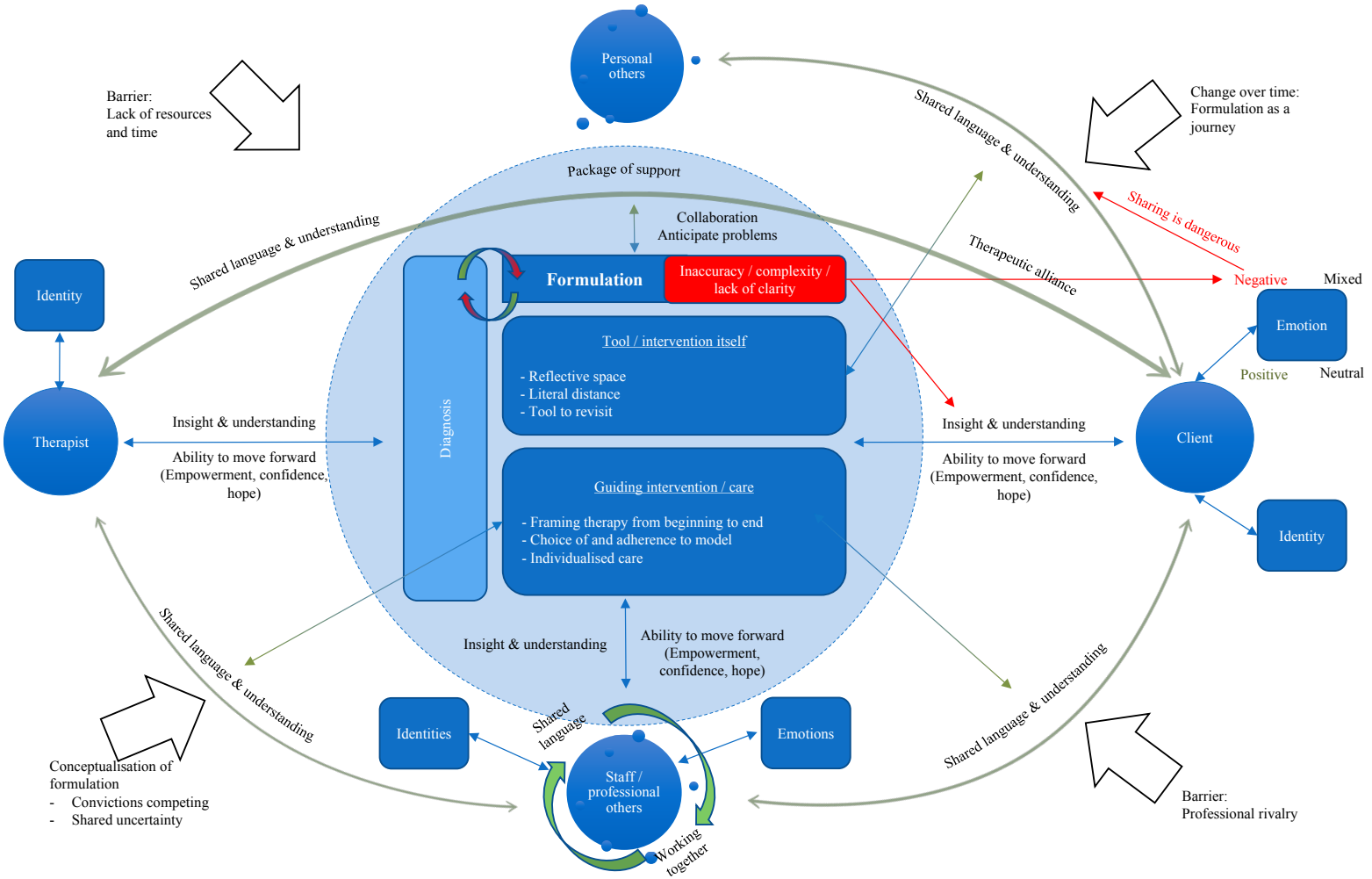

Figure 5. Conceptual model: patient and clinician experience of formulation

Core of the model. At its core, formulation can be perceived either as shaping the experience of (i.e. guiding) therapeutic intervention and care (whether positively or negatively), or as tangible tool (when developed in diagrammatic or written form) or intervention in itself. It can work as intervention by providing reflective space, literal distance and perspective (if developed in diagrammatic or written form), and as tool to be revisited by both SUs and staff. If the formulation is interpreted as inaccurate or too complex, it may deter SUs from using it and staff from incorporating it into care plans. Part of this interpretation depends on how formulation is conceptualised. Formulation can guide therapy or care-planning by framing this from start to finish and for some clinicians by helping them choose and adhere to a model. It can lead to more individualised care by staff, which may otherwise be based on diagnosis and heuristics (which can be seen as less meaningful by staff).

Some perceive diagnosis as providing a framework for the richer detail of formulation. Formulation can thus be interpreted as different from but complimentary to diagnosis, both seen as fitting within larger support packages and the biopsychosocial model. The resulting sense of coherence can promote SUs' overall understanding and sense of security. From a more negative perspective, others experience unhelpful tension between diagnosis and formulation. For some SUs, diagnosis is experienced as providing stronger validation of and justification for their difficulties (i.e. formulation can be less helpful than diagnosis). Sometimes formulation can be so upsetting SUs choose to keep this apart from other parts of care and their lives outside therapy. For others, diagnosis is experienced as implying something negative about themselves (and formulation can thus be more helpful). Clinicians are key in how relationships between formulation, diagnosis, and other care components are conceptualised – both to SUs as well as to colleagues. More tension can be experienced in teams with more professional rivalry or where there is pressure to conform to the medical model.

Individual (micro) level of the model. When perceived as helpful, formulation can increase insight and understanding for SUs, therapists, and other professionals. This includes insight into SUs' problems, deeper understanding of behaviour patterns, and of links between past and present. It also includes staff's understanding of their emotional reactions and their impact on these factors. These changes in understanding can in turn influence the formulation process.

Formulation can help its participants move forwards through empowerment and validation, increasing confidence and hope, and offering new skills and perspectives. These factors can provide motivation to continue therapeutic work for each of the three groups, leading back into the formulation process. Staff may also gain individual satisfaction. If formulation is perceived as unhelpful or inaccurate, it may thus have negative consequences by increasing confusion and a sense of invalidation and disempowerment.

Both of these factors (i.e. insight/understanding and ability to move forwards) can affect identity and role perceptions. Formulation can promote clarification, assimilation, awareness, and acceptance of self or of staff's professional roles in an ongoing process (thus leading back into the formulation). Psychologists in particular described formulation as cornerstone of their professional identity (Picken & Cogan, 2012), and facilitating formulation was an easier and more experiential way of demonstrating their work to colleagues than trying to explain this verbally. Conversely, some SUs view formulations as only temporary impressions of the self.

These factors can lead to strong emotional responses, although these were not described by individual therapists in the context of individual formulation. Staff describe experiencing strong emotion when listening to or discussing SUs' stories as part of formulation. SUs can experience emotions as positive (e.g. optimism, relief, reassurance, and gratefulness due to feeling more normal and accepted), negative (e.g. anger, sadness, hopelessness, fear due to remembering painful memories and realising their impact on current difficulties or their role in these), mixed, or neutral. For some SUs these are fleeting, for others longer-lasting. For many SUs these emotions shift over time, generally from negative to mixed or positive. Formulation inaccuracy, complexity, and opacity more likely lead to negative than positive emotions. Emotions can either encourage or inhibit SUs' sharing their formulations and either strengthen or weaken their relationships with others (including their therapist, other staff, and individuals in their personal lives). If SUs experience strong negative emotions, they may keep formulation as an isolated process within treatment or disengage from it.

Relationship (meso) level of the model. Formulation can create shared language and understanding between individuals about often complex topics. Some SUs find it helpful to show diagrammatic or written formulations to others involved in their care or personal life, both to share their difficulties and to give advice to individuals with similar problems. Others choose not to share their formulations due to difficulties understanding the formulation, viewing formulations as potentially damaging to their relationships, and the formulation being too upsetting.

Formulation can thereby either lead individuals to work together or negatively impact working relations. Between SUs and therapists, formulation can raise awareness of the collaborative nature of the therapeutic alliance. It can strengthen the therapeutic relationship directly by demonstrating the therapist's understanding and competence (engendering trust in the SU, and validation in the therapist), and by helping the therapist anticipate, prevent, and manage possible problems or ruptures. For staff, formulation can lead to a sense of team unity, generating collaborative and consistent team approaches towards work with each other and SUs. Conversely, formulation may have the opposite (i.e. a negative) effect for both SUs and staff if experienced as unhelpful.

Systems (macro) level of the model. Various systemic factors can influence perception, use, and experience of formulation. Formulation's fit with other care components and approaches

(including diagnosis and the medical model) can be influenced by team culture (e.g. professional roles and rivalry). There are also several barriers to using formulation – most prominently lack of resources and time, both for conducting formulation and for its preparation. A negative aspect of formulation may thus be that it expends limited resources. Other barriers can include formulation complexity, strong negative emotional responses, and lack of agreement on what to include. Other factors for staff can involve feeling excluded from the process, lack of understanding about how formulation may be beneficial, and a perception formulation is only conducted by certain professionals. Formulation may be viewed as more or less helpful depending on how it is conceptualised. For example, staff can conceptualise formulation as "convictions competing" (e.g. statements of fact, helpful through being "right") or as "shared uncertainty" (e.g. as speculative but valued synthesis of ideas and hypotheses). Accuracy also appears important to SUs: inaccuracy can negatively impact therapeutic alliance and SUs' insight and understanding, ability to move forward, and emotional experience. Formulation's uncertainty can lead therapists to be concerned about when formulation is "good enough", with its complexity sometimes making it difficult to develop, use, and share. These factors can all change over time.

Strengths and Limitations

At the study level. Generalisability of the included studies is limited due to their qualitative nature, small sample sizes (M=11), lack of detail given by some authors regarding certain study characteristics (e.g. setting, formulation framework and method, and participant descriptors), and imbalance between gender and/or ethnicities. Once more research is available, future syntheses could be conducted on formulation experience according to underlying theoretical framework (e.g. CBT or CAT), population (e.g. per age group, mental health difficulties), or setting (e.g. inpatient versus outpatient). Future synthesis could group studies according to philosophical assumptions (e.g. IPA versus thematic analysis), as findings will inevitably reflect authors' approaches (Duggleby, Holtslander et al., 2010).

No study measured therapist fidelity to the defined formulation process (e.g. CBT; Redhead et al., 2015). Most studies did not describe or evaluate how formulations were developed, including what structure (if any) was used, during which session(s) this took place, how many sessions were required, or the experience of therapists leading the formulations. Although studies were perhaps more ecologically valid in letting formulations develop naturalistically, this does limit generalisability regarding specific types of formulation. Most studies did not state when data was collected in relation to the therapy process. Of those describing this, most did not evaluate views of formulation at different time-points, although one paper argues formulation may be remembered differently over longer time-periods (Chadwick et al., 2003). One study recognised waiting too long post-formulation might make it difficult to disentangle views about formulation from views about other therapy components (Halpin et al., 2016).

Some studies recognised their sampling methods might have led to inclusion of participants with strong feelings (whether positive or negative) about formulation (Christofides et al., 2012; Mohtashemi et al., 2016), both in the case of self-selection (i.e. in opportunity sampling) and in the case where participants may have been selected due to appearing to have responded well or having good therapeutic relationships (i.e. in purposive sampling). Either case could cause bias by over-reporting either negative or positive responses (Kahlon et al., 2014). Three (Chadwick et al., 2003; Evans & Parry, 1996; Hollingsworth & Johnstone, 2014) of the four (Shine & Westacott, 2010) mixed method studies described some incongruence between their qualitative data (indicating change) and quantitative data (demonstrating no significant change). Evans and Parry (1996) considered this might be due to participants feeling able to be more "honest" on anonymous questionnaires or due to social desirability effects during interviews. Most interviews regarding team formulation were conducted by professionals (i.e. colleagues) within the service; social desirability effects must therefore be considered. Alternatively, the measures may not have been sensitive enough, or only sensitive to positive factors reported by participants.

No study evaluated whether non-specific factors accounted for viewpoints described by participants. Such factors include consultation space, nature and power of therapeutic relationship, interpersonal styles of participants and/or therapists, and increased team contact in the case of team formulation (Hollingsworth & Johnstone, 2014; Kahlon et al., 2014). However, many first-order constructs demonstrate participants specifically referenced formulation whilst describing their experiences.

At the review level. A strength of this review is its methodology: it is highly replicable and meta-ethnography is well-established within qualitative research. Four core themes were identified across the experiences of 94 patients and 105 staff despite variable characteristics and aims of the included papers. Saturation was therefore likely achieved, indicating constructs may reflect formulation experience across the SU, therapist, and staff populations well; that future relevant studies may find comparable constructs; and that suitable number of studies were included in the review (Knight, 2016). A conceptual model was produced showing the patterns and relationships between SUs, clinicians, and other staff in relation to formulation, rather than just summarising results (Duggleby et al., 2010). It is the first synthesis of qualitative research in this area, bringing together both SU and staff perceptions.

A limitation is that only the lead author conducted the synthesis. Lack of triangulation with another researcher may have resulted in bias and affected rigour. A natural limitation of meta-ethnography is that results are based on other studies' findings, not raw data. Consequently, original authors' assumptions continue in the meta-synthesis (Toye et al., 2013). Furthermore, due to its interpretative nature, the findings presented are only one possible interpretation; other reviews may generate different conceptual models and constructs as researchers will always take existing perspectives

and ideas into analysis. It can also be difficult to present exactly how constructs were developed or where they originated due to meta-synthesis' iterative nature (Malpass et al., 2009; Toye et al., 2013). A final limitation is that the conceptual model is based on studies predominantly using cognitive-behavioural (n=8) and cognitive-analytic (n=3) formulation frameworks due to a lack of research using other approaches.

Clinical Implications

For patients and their carers. Overall, qualitative research thus far demonstrates formulation can be a beneficial part of mental healthcare for patients, but requires further exploration (Summers, 2006). Patients and carers should know their experience during formulation may be mixed: some may experience relief (Leeming et al., 2009), strengthening of identity (Kahlon et al., 2014), and confidence in managing difficulties (Redhead et al., 2015), whilst others may experience it as distressing and challenging (Chadwick et al., 2003). In many cases, these experiences may shift over time (for example, due to changes in symptom severity and thinking styles). Patient experience *after* formulation appears similarly varied and does not necessarily relate to how difficult they experienced the process. Some patients may view formulations as time-bound, unhelpful in terms of not leading to symptom improvement, and not applicable outside therapy (Hamill et al., 2008). Others may perceive formulation as useful in increasing their self-reflection, insight into, and understanding of their difficulties, strengths, identities, and interpersonal relationships (Shine & Westacott, 2010). These benefits might be experienced despite or even due to distress experienced during formulation development. As one author put it, formulations can "hurt and heal through processes of making and losing connections, contemplating risks, and learning how to cope with a complexity of emotions" that may arise (Hamill et al., 2008, p. 580). Despite formulations being difficult, it may be beneficial for patients and carers to persevere for potentially ensuing therapeutic benefits.

For clinicians.

Formulation with SUs. Corresponding with the mixed experiences described above, clinicians could provide patients with a stronger rationale for undertaking formulation despite its difficulties by discussing its "insight development" component (Halpin et al., 2016). They could also incorporate "safety modules" (e.g. as used in trauma work) with emphasis on promoting SUs' capacity to communicate distress (Halpin et al., 2016). SUs may find it difficult to communicate distress and address perceived inaccuracies; therapists need to recognise this and that it may take time to develop therapeutic alliance that enables truly collaborative formulation (Kahlon et al., 2014). Formulating in a sensitive, attentive, normalising, and valuing way whilst inviting clients to share their opinions and encouraging them to take ownership may maximise its benefits and minimise negative effects (Redhead et al., 2015).

Clinicians should be aware of SUs potentially negative responses to formulation throughout sessions so they can be resolved during therapy (Redhead et al., 2015). SUs inability to engage and identify with formulation indicates one explanation for intervention drop-out (Kahlon et al., 2014). When negative reactions to formulation do occur, therapists should explore the meaning of these responses to maximise therapeutic potential and develop clinical practice generally (Pain et al., 2008). Formulation may elicit "blocked off" emotions and cognitions that can be hard to confront, but can lead to better understanding of problems, enhance the therapeutic relationship, and offer essential scaffolding to learn to manage intolerable emotions (Evans & Parry, 1996). Beyond the client-therapist relationship, therapists should help patients consider how their formulations could work as "accounting devices" within their social environments. They should therefore not only help patients develop cogent self-narratives, but improved tools for sharing their experiences (Leeming et al., 2009).

Formulation with colleagues. Whether developing formulations with SUs or with colleagues, clinicians should be flexible regarding their language use so this makes sense to the receiver(s) (Cairns et al., 2015). Shared language between team members can enhance sense of coherence, so consideration should be given to how formulations are developed contingent on team members' writing skills, first language, theoretical approaches to practice, and academic achievement (Hamill et al., 2008).

To implement team formulation within services, it appears helpful to discuss complex clients staff feel stuck with to enable "early wins", generating narratives that can then be developed. It appears beneficial to keep team formulations simple by using one consistent formulation framework to organise ideas; other models may be used in informal consultation. Asking staff to use supporting documentation corresponding to the formulation framework can help them collect relevant information and take ownership. Staff at all levels should be included in meetings to ensure team coherence and consistency around formulation, particularly if this leads to interventions with patients (Craven-Staines, Dexter-Smith et al., 2010).

For service managers, policy makers, and funders. Means of sharing formulations between professionals consistently and assessing their benefit to clients (e.g. via more diverse outcome measures) are needed. These needs could be addressed through conversations with and further training of professionals already using formulation to provide them with confidence and competence to progress their roles and provide training and/or consultation to multidisciplinary colleagues (Christofides et al., 2012). One study suggests the RCPsych review how formulation is conceptualised to trainee psychiatrists and provide training by psychologists alongside psychiatrists to encourage skill-sharing and unified working (Mohtashemi et al., 2016).

Formulations are most beneficial when firmly embedded within services, with strong connections to staff training, SU treatment, and personal development (Summers, 2006). Formulation

may change staff culture and encourage team-working when challenges are identified. Team formulation could not just benefit SUs (e.g. through improved care-planning), but also decrease staff stress and improve job satisfaction (Summers, 2006). Clinicians, service managers, and policy makers could more proactively disseminate more knowledgeable accounts of psychological difficulties within and outside services based on formulation frameworks. Leeming and colleagues (2009) suggest these concentrate on highlighting both the aggregate impact of stressors as well as protective factors; detailing the complex interdependence and variety of physiological, behavioural, emotional, and cognitive reactions to adversity; and challenging mad/bad and normal/abnormal polarities (Clarke, 2004).

Research Implications

Qualitative research. Although this meta-synthesis begins to draw together the available qualitative data on formulation, another synthesis (using another approach, like grounded theory or meta-narrative) would be advisable. Syntheses of the experience of formulation according to different underlying theoretical frameworks (e.g. CBT or CAT), methods (e.g. individuals versus team; verbal, written, diagrammatic), populations (e.g. per age group, mental health difficulties, intellectual disability), and settings (e.g. inpatient, outpatient, intellectual disability services) would be beneficial once more qualitative data becomes available.

Future qualitative studies would benefit from interviewing individuals at varying time-points after formulation to capture a wider range of perspectives (Kahlon et al., 2014). A particularly useful area to understand may be the short- and long-term benefits and costs of distress experienced during formulation (Halpin et al., 2016). It would be helpful to have a more longitudinal understanding of how clients and staff engage with, use, and are affected by formulations and differences between positive and negative responses (Kahlon et al., 2014; Leeming et al., 2009; Pain et al., 2008). Within this, it would be beneficial to explore patient and staff experiences of specific aspects of formulation deemed less versus more useful, and provide a foundation for comparing individuals reporting less versus more positive outcomes (Hamill et al., 2008). Other domains include exploring how the roles of patient and therapist (or participant versus facilitator in the case of team formulation) are viewed; how patients and staff decide their formulations are "accurate"; how important accuracy, reliability, and validity are in formulation; and the extent to which client responses are related to how collaborative the formulation was experienced (Redhead et al., 2015). The area perhaps most lacking is team formulation. Specifically, it would be beneficial to explore the impact of team formulation on team functioning and care provision through multidisciplinary staff and SU perspectives (Christofides et al., 2012).

Quantitative research. Large-scale quantitative studies would enable comparison between patient populations and increase generalisability. Regarding individual formulations, it would be beneficial for studies to use repeated-measure designs to evaluate the effect of formulation on specific

factors like therapeutic alliance (Evans & Parry, 1996). Future studies could investigate whether these differ depending on formulation type, structure, or duration; therapist experience or fidelity to a defined formulation process; on SU interpersonal or thinking styles; or type, duration, and chronicity of symptoms (Redhead et al., 2015). With regards to team formulation, it would be beneficial to compare team formulation with more generic team meetings to control for "non-specific" effects like increased team contact and reflection space (Hollingsworth & Johnstone, 2014). Studies could use repeated measures to capture staff perceptions before and after team formulation; assess impact on SU experiences, outcomes, and cost-effectiveness (e.g. related recovery, discharge, improvements in functioning, and reduced medication); and on teams' risk perception and management (Mohtashemi et al., 2016). Future studies should clearly describe participants, formulation process, and settings to ease comparison between studies and permit more reliable and valid reviews.

Relation to Previous Reviews

This review's findings and clinical and research implications largely correspond with the aforementioned narrative and quantitative reviews. Persons and Hong (2016) reviewed RCTs, uncontrolled trials, and case studies (largely using functional analysis) on formulation-guided versus protocol-guided CBT. Although no study in the current review evaluated formulation-guided versus protocol-guided therapy, patient and clinician views generally supported Person and Hong's (2016) conclusion formulation-guided therapy and team work can be efficacious if formulation is developed appropriately (see Clinical Implications). Qualitative studies on the experience of formulation-guided versus protocol-guided therapy may provide further insight. A review of Cognitive Behavioural Psychotherapy (CBP) formulation identified themes regarding efficacy, including its use, usefulness, patient and clinician agreement, and influence on outcome (Aston, 2009). It emphasised research paucity in all these domains, particularly regarding patient views (which this review aimed to address). Formulation efficacy was also reviewed by Rainforth and Laurenson (2014), along with its reliability, validity, function, and process, and practitioner training requirements. They concluded there is some evidence for formulation efficacy despite research paucity, and correlation between level of practitioner training and length of qualified experience in developing improved formulations. A 2015 systematic review similarly found evidence more experience and training increased patient-clinician agreement; results overall demonstrating slight (.1-.4) to substantial (.81-1.0) inter-rater reliability (Flinn et al., 2015). Findings correspond with the current review's recommendation for further training of professionals regarding formulation. Mumma (2011) also emphasised research paucity regarding formulation validity, suggesting evaluation methods for four types of validity: content, construct, predictive, and treatment-related. Three narrative reviews by Kuyken and colleagues (Bieling & Kuyken, 2003; Kuyken, 2006; Kuyken et al., 2008) likewise described criteria to evaluate whether cognitive formulations follow scientific inquiry, including validity, reliability, and efficacy. Validity and reliability were loosely addressed in this review relating to formulation "accuracy", confirming this

is important to both patients and clinicians. Above all, reviews confirmed the lack of formulation literature, recommending further research in all domains.

Conclusions

The present meta-ethnography of 17 studies is the first to draw together qualitative research on patient and clinician perspectives of formulation, providing new and richer understanding of their experiences. It has produced a synthesis of cross-data themes and a new conceptual model regarding the connection between these themes, demonstrating the importance of considering the function of formulation and its impact on an individual-, relationship-, and systems-level. It suggests formulation is used by both patients and staff as either guidance for intervention or as tool or intervention in itself. It also demonstrates the experience of formulation may be mixed, and that – despite or sometimes because of its challenges – it can have important implications for patients, clinicians, and teams in relation to personal insight and understanding, clarity regarding identities and roles, and motivation to move forwards. It can play an important part (whether positively or negatively) in the development of therapeutic alliance and team relationships and can create shared language and understanding. Part of this development and views regarding how formulation can fit in with other parts of care appear to depend on how formulation is conceptualised and on presence or absence of barriers to formulation, all of which can change over time. Although this synthesis begins to reduce the lack of integrated knowledge about the experience of formulation, both qualitative and quantitative evaluation of formulation should continue. Further research will continue to expand our understanding of and the evidence-base for this part of clinical work and hopefully lead to better informed mental healthcare and multidisciplinary work.

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Service Improvement Project

Patient and staff views of psychiatric ward activities and efforts to increase choice: A qualitative study

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Date of submission: 21st May 2017

Word count: 5453 words (not including contents pages, executive summaries, tables, figures, appendices, and reference lists)

Journal: *Journal of Mental Health*. The journal has been chosen because it has previously published articles relating to inpatient mental healthcare, accepts qualitative research, has the highest impact factor rating amongst relevant journals, and encourages multidisciplinary research, which is important considering this paper contains findings important to multidisciplinary healthcare professionals (see Appendix E*)*

Service Improvement Project

Patient and staff views of psychiatric ward activities and efforts to increase choice: A qualitative study

Inpatient services are a vital yet expensive component of mental healthcare, and those admitted often stay in hospital for long periods (Sharac, McCrone et al., 2010). With global cutbacks on mental healthcare and a shift towards "Payment by Results" in the UK (Department of Health Payment by Results Team, 2011), the drive to use mental healthcare resources effectively is larger than ever (Milne, 1984; Shek, Stein et al., 2009). Despite this, there is little research on acute inpatient care in the UK as researchers have concentrated more on alternatives (Bowers, Chaplin et al., 2009). A literature search found even less research on inpatient activity programmes despite long-standing critique of their content and quality, with the few existing studies using community rather than inpatient samples (Quirk, Lelliott et al., 2006; Rebeiro, 1998).

Inpatient Activities: Definitions and Challenges

The term "activities" has acquired numerous definitions and is used interchangeably with "occupations", "roles", and "therapies" within research and between services. To draw on the full scope of available literature, it will be used here in its broadest sense as "any meaningful activity, occupation, therapeutic engagement, or role that occupies a person's time" (Jackman, 2016, p. 279). Activities, in this general sense, are evidenced by the few existing studies as important to promoting mental health.

Research on community activity engagement by individuals with mental health issues reports increases in motivation (Chugg & Craik, 2002) and sense of purpose (Mee, Sumsion et al., 2004) due to acquiring new skills, learning to cope with challenge, experiencing success, and developing relationships (Fieldhouse, 2003). Another study found links between increased engagement in activities and sense of control over symptoms (Breier & Strauss, 1983). A recent theoretical review of mental healthcare occupational therapies thus concludes occupation can cultivate dignity, direction, and identity by enabling social roles, self-expression, opportunities to problem-solve and contribute to the community, skill development, self-regulation, and enjoyment (Jackman, 2016).

Unfortunately, a Care Quality Commission (CQC; 2009) report highlighted the dearth of activities available for inpatients across 64 NHS Trusts: 35% reported insufficient activities on weekdays, whilst over half (54%) reported the same for weekends and evenings. Furthermore, only 29% had received talking therapies overall, including less than half who expressly wanted them (although 92% of those who *had* received talking therapy confirmed it as helpful). Consequently, a Royal College of Psychiatrists (RCPsych, 2011) paper concluded therapeutic activities and psychological therapy access "were below the levels patients feel they need… and falls short of … acceptable standards recommended by NICE and other health bodies" (p.9). An independent inquiry by

Mind (2011) echoed activity and structure were crucial to patients they spoke with. Many felt wards did not address the source of their difficulties and only had a containment function.

Current Best Practice Guidelines

These failings led to several improvement efforts and standards, locally and nationally. One local ward effort highlighted by Mind (2011) included creating an "activities organiser" role, who recruited external professionals and volunteers specialised in activities like tai chi, thinking skills, and relaxation. The ward also organised group psychoeducation and support regarding diagnoses and medication, alongside regular ward community meetings. National initiatives include "Refocusing" (Dodds & Bowles, 2001); "Productive Ward: Releasing Time to Care" (White, Wells et al., 2014); "Star Wards" (to which 80% of UK mental health wards are signed up at time of writing; Janner, 2007); and "Accreditation of Inpatient Mental Health Services" (AIMS) scheme, through which wards are reviewed against standards (Cresswell, Beavon et al., 2014; Mind, 2011).

Many of these initiatives relate to RCPsych's (2011) proposed standards for psychiatric inpatient care, including four related to activities; 1) Wards should be therapeutic environments with organised routines of age-appropriate, pleasurable, and meaningful activities interspersed with frequent rest. These should include outdoor and indoor activities, and occupational therapies. 2) Wards should use recovery-based approaches: activities should prepare inpatients for community reintegration, including by enabling maintenance of pre-admission activities where possible or incorporating these into care plans. 3) Wards should enable access to a comprehensive range of psychological interventions (at least one per week). 4) Wards should provide personalised care through daily one-to-one interaction with the primary nurse alongside regular contact with a mix of multidisciplinary staff, including occupational therapists (OTs) and dedicated psychologists.

Implementation of these types of standards across the UK led to some initial improvement. Star Wards (2013), for example, reported increase in activities in 88% of their wards. Unfortunately, many gains reduced in 2011 following the economic crisis. The Commission on Acute Adult Psychiatric Care (CAAPC, 2015) noted a "performance and pressure spectrum". On wards at one end of this spectrum, patients felt "engaged in activities and ways of thinking about recovering and the future" (p.13) and staff reported appreciating multidisciplinary work, especially psychologist and nurse involvement. On wards at the other end, patients felt "stuck in locked wards with nothing to do" and staff complained of "no scope to do anything with patients other than routine observations" (p.13).

Stakeholder Consultation

Evidence thus indicates higher activity and occupation levels are beneficial to and wanted by staff and inpatients, yet much remains unknown about how they view and experience activities and which activities they want (NICE, 2011b). For example, a study with feedback from 160 trainees

following observation in 22 inpatient wards identified lack of therapeutic direction, but provided no guidance regarding improvements (Walton, 2000). Similarly, the CAAPC (2015) communicated calls from patients and carers for a wider range of positive ward activities and psychological therapies, but not what this range should consist of. Research *has* evidenced one process-related element: being provided with choice in activity (Sumsion & Law, 2006). One study found less improvement regarding preoccupation and suspiciousness for inpatients with schizophrenia who had six months of therapist-chosen activities, than those having the same length of self-chosen activities (Hoshii, Yotsumoto et al., 2013).

Rationale and Aims

Assessing clinician and patient views and experience of inpatient activities is both clinically and economically important: research can help plan service expenditure by recommending suitable banding and staffing levels, and the few studies available have positively linked activity to clinical outcomes (Collins, Ellsworth et al., 1985; Sharac et al., 2010). Such research corresponds with the DOH's (2004) emphasis on a needs-based approach. However, of the few existing studies on activities in mental healthcare, none compare experiences of different activities, or staff with patient views. No study has therefore answered the National Institute of Clinical Excellence's (NICE, 2011a) call for qualitative research into the "activities and occupations service users want on inpatient wards".

This paper aims to respond and fill gaps in the literature by addressing some of these uncertainties in one acute psychiatric inpatient unit, Sycamore Ward (SW). At time of writing, the ward had recently made efforts to increase activity provision and inpatient choice, including hiring more OTs and introducing daily nurse-led "choice of activity slots". The service was interested in evaluating and further developing activities through exploring the following questions:

- What is the experience and view of inpatients and staff on current activities offered on SW? Which are viewed as most beneficial and best-liked, and why?
- Which other activities would inpatients and staff like to be offered, and why?
- Do patient and staff views on activities differ, and if so, how?
- What is the experience/view of patients and staff on current efforts to increase choice, and how can these efforts be developed further?

Method

Admission Criteria

SW (part of Avon and Wiltshire Mental Health Partnership NHS Trust; AWP) provides 15 inpatient beds to adults experiencing acute psychiatric crisis requiring specialist investigation, assessment, and intervention. Individuals must be over age 18, living within Bath and North East Somerset (BaNES; except out-of-area placements), and unable to live at home due to their condition's

complexity (BaNES Council, n.d.). Admissions are on average four weeks but discharge is considered per individual.

Activities Description

Activity timetables are created weekly by the lead OT (see Table 1). Four to seven activities are scheduled every weekday (two to four per morning; one to two per afternoon; one per evening).

Table 1

One-Week Sample of Sycamore Ward Activities and Facilitating Staff Members (17th-23rd Oct 2016)

Activity Name	Facilitating Staff Members*
Word Wheel	OT
Mutual Help Meeting	OT
Community Group	OT + OT Technician
Art Therapy	AT
Self-Compassion Group	CP
Relaxation	OT
Bath City Farm	OT + OT
Country Walk	OT + OT Technician
Cooking / Breakfast Club	OT / OT Technician
Pottery	OT + OT + OT Technician
OT Care Plans: Help Me Help You	OT
Gym	OT Technician
Café Group	OT Technician
Nurse-led choice of activity	N

Note. *CP: clinical psychologist, N: nurse, OT: occupational therapist, AT: art therapist, V: volunteer

Design

Qualitative methodology matched the study's aims by enabling open exploration of inpatient and staff experiences. It also suited the study's philosophy: instead of enforcing a strict agenda, it provided participants opportunity to speak about what was most important to them. By facilitating narratives of a smaller number of participants, this approach would produce thicker descriptions of experiences than quantitative questionnaires (Carpenter & Tracy, 2015). This also corresponds to NICE's (2011a) call for qualitative research into this area.

Following conversations with staff and Person with Personal Experience (PPE), focus groups were chosen to facilitate conversations between participants. They allowed clarification of study aims and recruitment of multiple participants simultaneously, which can be difficult on a busy inpatient ward

with high turnover. Sociodemographic data was also collected to assess whether groups included a good range.

Thematic Analysis

Thematic analysis (TA) was chosen as it is a flexible approach that fits multiple epistemological paradigms (Parveen, Morrison et al., 2011). It enables recognition and in-depth analysis of emergent patterns or themes derived from complete description of the data set, which might not be explicitly stated in response to stem questions (Braun & Clarke, 2006; Carpenter & Tracy, 2015). It also provides a structured series of phases (Braun and Clarke's (2006) guidelines were followed here), allowing exploration of personal meaning for participants.

The TA was inductive (i.e. data was not fitted to pre-existing coding frames) and semantic (i.e. did not look beyond what was said; (Braun & Clarke, 2006; Carpenter & Tracy, 2015). Group recordings were transcribed verbatim and double-checked for accuracy by the groups' moderator to improve reliability. Two researchers reviewed data independently. Notes were translated into codes and uploaded to Nvivo for Mac (v11.3.2) before being classified into defined themes and subthemes (Carpenter & Tracy, 2015). Following individual examination, themes were discussed by both researchers and final themes agreed following review and discussion with a third researcher.

Steering Group

A Steering Group established before recruitment maintained awareness of direct experience perspectives and ensured the project met inpatient, staff, and service needs and interests. It included two staff (nurse and acting ward manager), one person with experience of being admitted on the ward, and one carer of someone admitted on the ward. They were asked to provide input on study materials (e.g. interview schedules) and recruitment strategy, support recruitment, and comment on findings and recommendations (Terms of Reference in Appendix F).

Participants and Recruitment

Two groups of adult participants were included: 1) current inpatients and 2) permanent staff. The aim was to recruit five to seven participants each, corresponding with research demonstrating focus groups should ideally include four to eight participants (Wilkinson, 2015). Inclusion criteria of inpatients was based on admission criteria. Exclusion criteria included lacking capacity for informed consent or level of impairment or disruptive behaviour preventing ability to participate.

Due to time pressures and rapid inpatient and staff turnover, an opportunity sample was recruited. Posters were displayed on the ward and emails circulated amongst staff to distribute study information. Ward handover and "mutual help" meetings (including staff and inpatients) were also attended. Of the ten inpatients and fifteen staff approached, four inpatients and seven staff attended. Of the four inpatients, one refused the consent form and therefore could not participate. Ultimately ten

individuals participated (three inpatients and seven staff; Figure 1). Inpatients and staff were not allied to each other in any manner.

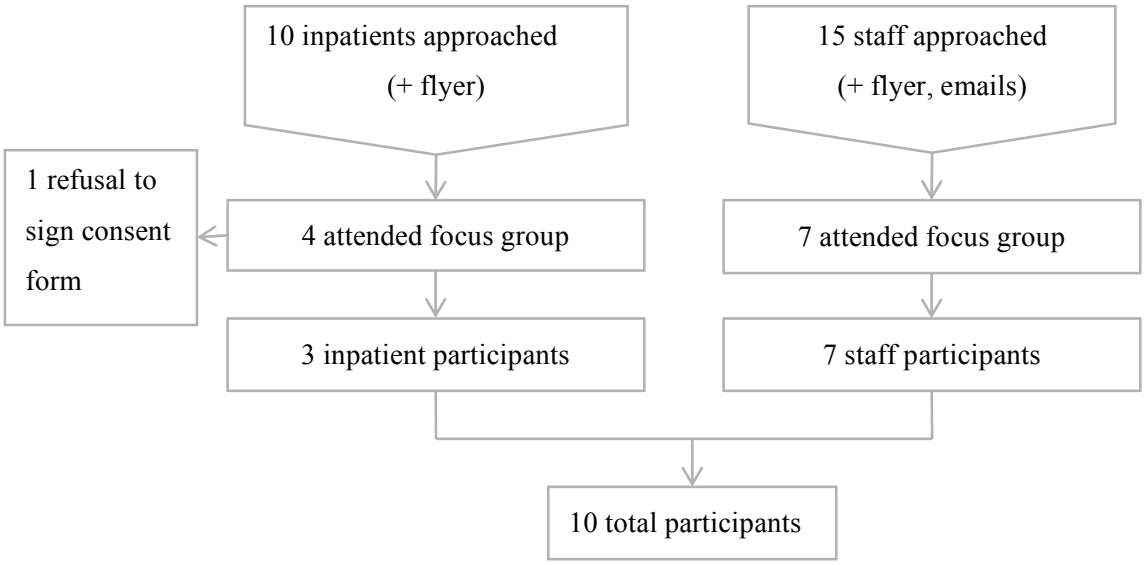

Figure 1. Flow diagram demonstrating patient recruitment to the study

Procedure

Both focus groups were facilitated by the lead researcher, ensuring key questions were consistently asked. Participants were given study information and completed a consent form and sociodemographic questionnaire. At the start of the focus group, participants were reminded about its purpose, that it would be audio-recorded, to maintain confidentiality, and provided opportunity to ask further questions.

Validity of the eight-item open-ended interview schedule (Table 2) was enhanced by following the seven-step focus group instrument development process by Krueger and Casey (2014). Development was thus iterative, including brainstorming questions with stakeholders, grounding ideas in study aims and previous research, and incorporating steering group feedback (including individuals from the target populations). A semi-structured approach was adopted as it is versatile enough to enable discussion of spontaneous topics whilst facilitating structured exploration of key issues (Arkless, 2005).

Table 2

Stem Questions Used in Focus Groups

	Question	Type / Phase*
1)	Briefly tell us your first name and what you most enjoy doing in your spare time when you're not on the ward**	Opening/warm-up
2)	I'd now like you to think back to when you first arrived at Sycamore Ward. What was your first impression of the activities offered on Sycamore Ward?	Introductory
3)	What are the benefits of the current activities offered on Sycamore Ward?	Transition / easy
4)	Which activities on Sycamore Ward do you like best?	Key / more difficult
5)	Which other activities would you want to see offered on Sycamore Ward?	Key / more difficult
6)	What has been your greatest disappointment with the activities offered on Sycamore Ward?	Key / more difficult
7)	The ward has tried to make it more possible for people to choose their own activities, for example through the nurse-led "choice of activity" slots on the timetable. What is your experience of these attempts to increase choice for people?	Key / more difficult
8)	As we finish now, I'd like to end by going around the table one at a time again to briefly answer the following question. If you had the chance to give one piece of advice to the people who run Sycamore Ward, what advice would you give to improve patients' experience of the activities here?	Conclusion / all-things-considered

Note. * Based on guidance by Krueger & Casey (2014), ** Inpatient focus group only

Reflexivity

It is important to recognise the possible impact of researchers' perspectives. JF is a 30-year-old, female Trainee Clinical Psychologist from mixed Euro-Asian ethnicity. She was raised in several European countries and consequently has predominantly Western perspectives. JF has had and heard both positive and negative experiences of inpatient work, particularly regarding resource shortages. She had the assumption inpatient care and activities can be useful, but many may not experience this and many staff might experience disillusionment or burn-out. She is interested in improving mental healthcare and hoped this study could be helpful for SW. She had no prior relationships with participants or the ward. The other researchers, all having different backgrounds and perspectives, worked with JF to triangulate findings and mediate bias by encouraging and providing reflection on researcher influences on procedure and analysis.

Ethics

Ethical approval was given by the University of Bath's Psychology Department Research Ethics Committee and AWP Quality Academy (Appendix G). The AWP Research and Development (R&D) Department classified the study as service evaluation project; review by an NHS Research Ethics Committee review was unneeded.

Findings

Participant Details

The sample included fewer men (N=4; 40%), and more White-British individuals (N=8; 80%) than other ethnicities (Table 3).

Table 3

Participant Details

Characteristic	All participants	Inpatient subsample	Staff subsample
No. of participants	10	3	7
Gender, female: N (%)	6 (60)	2 (67)	4 (57)
Age: mean (S.D.)	34.7 (12.9)	24.5 (9.2)	38.8 (12.6)
Ethnicity: N (%)			
White British	8 (80)	2 (67)	6 (86)
White & Black Caribbean	1 (10)	1 (33)	0 (0)
African	1 (10)	0 (0)	1 (14)
Marital status: N (%)			
Married / domestic partnership	3 (30)	0 (0)	3 (43)
Single, never married	5 (50)	2 (67)	3 (43)
Not disclosed	2 (20)	1 (33)	1 (14)
Highest level of education: N (%)			
GCSEs or equivalent	2 (20)	2 (66)	0 (0)
Undergraduate degree	4 (40)	0 (0)	4 (57)
Postgraduate degree	1 (10)	0 (0)	1 (14)
Not disclosed	3 (30)	1 (33)	2 (29)
Employment status: N (%)			
Employed	6 (60)	0 (0)	6 (86)
Student	1 (10)	0 (0)	1 (14)
Unemployed & looking for work	1 (10)	1 (33)	0 (0)
Unemployed & not looking	1 (10)	1 (33)	0 (0)
Not disclosed	1 (10)	1 (33)	0 (0)
Sexual identity: N (%)			

Characteristic	All participants	Inpatient subsample	Staff subsample
Heterosexual	6 (60)	1 (33)	5 (71)
Not disclosed	4 (40)	2 (66)	2 (29)
Religion: N (%)			
None	3 (30)	1 (33)	2 (29)
Christian	4 (40)	1 (33)	3 (43)
Agnostic	1 (10)	0 (0)	1 (14)
Not disclosed	2 (20)	1 (33)	1 (14)
Length of current stay: M		4 weeks	
Clinical diagnoses: N (%)			
Psychosis & anxiety		1 (33)	
Bipolar disorder		1 (33)	
Not disclosed		1 (33)	
Length of employment on ward (months): M (SD)			61.1 (77)
Length of employment in mental healthcare (years): M (SD)			9.8 (9.7)

Note. M = mean; N = number; S.D. = standard deviation

Themes

Thematic analysis resulted in five core themes, each with two to six subthemes (see Table 4*;* "I" denotes "inpatient", "S" denotes "staff"). Although data was coded for content rather than structurally coded (i.e. per question asked), many themes related to interview questions.

Table 3

Core- and Sub-Themes, With Number of Participants and Percentage of Focus Group Covered by Each Core Theme and Quotations for Each Sub-Theme

Themes	Inpatients		Staff	
1: Preferred Activities	N participants commented: 3 / 3	Focus group covered: 2.06%	N participants commented: 6/7	Focus group covered: 5.49%
Similarities	• "I love cookery group as well… they teach you how to cook a meal, you can choose what meal you want to cook, and I find that really helpful because I feel I lost all my skills that I had previously before coming here" (I2, female, age 31) • "Healthy diet, healthy living" (I3, male, 18)		• "It's quite nice…you get a service user who's maybe, an older male, maybe never cooked that much before and, kind of changing their opinions of doing cooking…Quite satisfying, for myself as a staff member" (S4; male, 29)	
Differences	• "everyday activities, like dominoes, you get to go to the cinema" (I3, male, 18) • "pottery is, if you're not very good at it, it looks childlike and I feel like an idiot… I'm really rubbish at it and I'll be at pottery group and that's an hour gone. I've, it's really hard with pottery, even if you're good at it, it's still hard to do pottery" (I2, female, 31).		• "people are so poorly, they find it hard to sit and concentrate for a period of time on a film" (S2, female, 46)	
2: Benefits	N participants commented: 3/3	Focus group covered: 6.58%	N participants commented: 7/7	Focus group covered: 10.29%
Social connection	• "I don't know if …they [the staff] like their day-to-day job…. I'd like to raise their spirits and I don't know just be one big happy family so we can all push through this together step by step" (I3, male, 18) • "I really felt that that helped, it wasn't just like an empty group, it was with other people, a group to help each other, supporting each other. I feel like that's how OT groups should be, helping each other… Like a family network. You might lack that on the outside" (I2, female, age 31)		• "they all sit around together, it's like a social thing isn't it? And some people are so isolative, it brings them out of their room and it helps them engage" (S2, female, 46) • "Sometimes when I've had relaxation sessions for an hour, there's been no relaxation, it's just been drinking tea and talking and you know, be human, humanistic and just connecting with people, engagement with people… just sharing and being human, stuff like that and just trying to, yeah, just come together with these people as human beings" (S3, male, age undisclosed)	
Discharge preparation	• "to help progress through society" (I3, male, 19) • "reminding me of being proactive in life" (I3, male, 19) • "led back into the same environments without better coping mechanisms" (I2, female, 31)		• "not only are people doing stuff what's in here, but they're doing stuff which they can continue, like after they're discharged, I think that's something that we gotta think about" (S4, male, 29)	

Themes	Inpatients	Staff
	• "wanting to go back to work but then I'm still not ready to go back to work" (I1, female, age undisclosed) • "really worried about moving back into community because they are really supportive the OTs here" (I2, female, 31) • "I always feel quite sheltered when I'm here, like in a bubble" (I1, female, age undisclosed)	• "actually as a ward we must be doing something good, because nobody wants to go" (S1, female, age undisclosed)
Skill development	• "I find that really helpful because I feel I lost all my skills that I had previously before coming here…I just lost my confidence. It's nice to have one-to-one session with OT and just get those skills back" (I2, female, 31)	• "they can also learn a skill that they might never have done before. Like something they've never had the opportunity to be doing, they can do" S4 (male, 29): • "Things also build on current skills…especially um, for example, healthy eating, doing healthy eating and cooking and whatnot, it's life skills" S5 (male, 35)
Distraction	None	• "it's a thought distraction… I can distract them from troubling thoughts they're having at the time. If they're focused on something else and actually doing something, if you could get them to participate in some of the activities, it takes their mind off what was troubling them in the first place" (S7, female, 57) • "I know S5 doesn't agree with me and historically OTs got quite upset about the word distraction, I love it, I've not got issue with it at all here. Try to distract people that's all, that's what I thought we were doing" (S3, male, age undisclosed)
Managing mood, emotions & behaviour	• "when I'm feeling aggressive towards myself or others, I use the gym instead to get rid of my aggression" (I2, female, 31)	• "the patients are really more settled, if there's loads of things for them to do, like all day, they're occupied, engaged and they're happier and the ward is calmer. And other days when there's less activities, they're bored, then they become more agitated" (S2, female, 46) • "I think like a lot of people they request medication when sometimes all they really need is just sit with them and you can reduce the amount of meds sometimes or the

Themes	Inpatients	Staff
		craving for the benzones, just by, distracting someone, talking to them, calming them down like that" (S2, female, 46)
Other benefits	• *Normalising*: "it helps you feel like, a bit of normality again" (I2, female, 31) • *Time off-ward*: "it's important to have time off the ward, even if it is still within the vicinity" (I2, female, 31) • *Freedom*: "the gym and leave is, a good way to, sort of have your freedom" (I3, male, 18) • *Fun*: "it was really just easy going fun" (I2, female, 31) • *Hope*: "it has led me to believe there is a way for life (I3, male, 18)	• *Normalising*: "it's a normalised activity" (S5, male, 35) • *Good memories*: "one of the ladies she's like 'I used to do a lot of pottery stuff' and that she was in a good place then, when she did that and that kind of brought her good memories and things" (S6, female, 27)
3: Challenges	N participants commented: 3/3 Focus group covered: 16.83%	N participants commented: 7/7 Focus group covered: 26.23%
Lack of resources	*Negative comments*: • "because they haven't always got time for that" (I2, female, 31) • "you might feel overwhelmed by the lack of staff giving you attention" (I1, female, age undisclosed) • "I haven't seen any groups like that in here, because it's just, about like lack of funding" (I2, female, 31) • "there's no financial aid for you to go anywhere" (I1, female, age undisclosed) • "I think that nurse-led activities is just a cop-out because they don't, even if you suggest something they say they haven't got time because they're doing write-up, or they're doing observing people, when they could be spending time with loads of people helping them" (I2, female, 31) *Contradictory, positive comments:*	*Negative comments:* • "lots of gaps but that comes down to sort of staffing levels" (S3, male, age undisclosed) • "take people to the cinema, there's only like two people, so if someone wants to come home, they all have to come back" (S2, female, 27) • "I think I'll have to concur with S4 about the staffing levels, I'd like to see more staffing levels, for example, on Monday and Tuesdays, I'm working on my own for a quite lonely, quite isolated sometimes" (S3, male, age undisclosed) • Regarding staying late: "I want to make sure it [referring to an activity] is available in the evenings" (S3, male, age undisclosed). *Contradictory, positive comments:* • "we've enjoyed two ward based OTs…having a very positive impact on ward" (S3, male, age undisclosed) • "we've got fifteen patients whereas before we had twenty-three, with less staff" (S7, female, 57)

Themes	Inpatients	Staff
	• "I feel like this stay, um, staff had more time for me than previous stays to help with my mental health" (I2, female, 31) • Regarding new OTs: "they have been amazing... Those are the new OT breed I was talking about. Um they're really good" (I2, female, 31)	• "when I came there was four OTs? I was quite shocked, I've been on wards and there's only been one OT and they have to be timetabled for specific days to come in" (S6, female, age 27)
Remit	• "when you're on that level of unwellness you shouldn't be on this ward…it unsettles the whole ward…and it makes us sort of feel all vulnerable" (I2, female, 31)	• "Sometimes, and this isn't negative, but maybe sometimes the groups are too focused when there are other things going on on the ward? You know, when it's really busy on the ward and the nursing staff are like pushed to the limit and an OT is actually providing one-to-one when actually we could do with the help on the ward. Rather than just one patient focus…the OTs are part of the nursing team but sometimes the OT is focused on one patient when actually there's chaos over the ward" (S1, female, age undisclosed) • "That's the problem isn't it, trying to get that balance of our role as an OT and our role as a kind of nursing support" (S4, male, 29) • "if I'm ever asked to help, I will help but…I'm stuck in between a rock and a hard place that I need to deliver what's on the timetable. So things are kicking off, I'm a bit like…unless somebody asks me to help, then I've gotta do this because it's on the timetable, it needs to be delivered. I need patients to be able to believe that they can believe in the timetable. The timetables …They need to be honoured. Patients will soon realise that you know if you don't honour it, they feel kinda worthless or abandoned" (S3, male, age undisclosed)
Negative attitudes	• "Staff are quite often deflated" (I1, female, age undisclosed) • "I feel like a lot of staff are down and they need to be lifted" (I3, male, 18)	• "you never know what you're going to get, so variable…I've been rammed by a wheelchair, been told to fuck off and fuck all of this… and then we've got people
	Variability:	

Themes	Inpatients	Staff
	• "I thought that everyone is generally like that's the work but just comes down to personality" (I3, male, 18) • "I think it's the luck of the draw of people's personality and the way they will think as well" (I2 female, 31) • Speaking about staff: "It depends on how patient you are and how perceptive you are of how other people react to you" (I1, female, age undisclosed)	playing the guitar, reading their poetry and you know, it's really heart-warming and so it's quite, it's everything really…you get mixed responses" (S3, male, age undisclosed)
Theft or damage	• "sort of take things home…When I come back, it's like where are the games gone? And it's like, there's just ends or bits missing or whatever" (I2, female, 31)	• "Even a simple group can take a lot of planning…and if someone kind of breaks it or ruins it…it's really disappointing not only for yourself for kind of building that up for nothing. For other people who really enjoy it as well" (S4, male, 29)
4: Choice	N participants commented: 2/3 Focus group covered: 1.2%	N participants commented: 5/7 Focus group covered: 5.96%
Experiences	• "I think that nurse-led activities is just a cop-out because they don't, even if you suggest something they say they haven't got time because they're doing write-up, or they're doing observing people" (I2, female, 31) • "Sometimes they say have you got a suggestion for something and put it on your notes but then I've given so many suggestions and I know you [referring to I2] have, and it's not discussed" I1 (female, age undisclosed)	• "I'll often say to them what do you want on the timetable that isn't there and usually it's just silence. So, you know… people say to me, the timetable's shit and I go, okay, I don't think it is shit, your words not mine, what would you like to see different? And then nothing. The individual can't seem to come up with a solution as to what they would like to see differently on the timetable... if you try to give people choice, you don't seem to get a lot back and that's about the mental health illness" (S3, male, age undisclosed). *Contradictory, positive comments:* • "Somebody asked me for relaxation… so I said right, that'll be on next week… Things do subtly change" (S3, male, age undisclosed). • "The struggle with the mental illness and the medication and the side effects and CPAs, you know, just the general busy nature of the ward, you know. I think they're really struggling with all of that without having to sort of take on, you know, making

Themes	Inpatients	Staff
		decisions, it feels like they want us to say this is what's available, what would you like to go to?" (S3, male, age undisclosed)
Methods	None	• *Individual interest checklists*: "And you find out things about people…because you've done that list before, and you're like oh my god I didn't know that they like that. And then you could go from there really" (S2, female, 27) • *Public list*: "A list put up on the ward where patients can write down what activities they would like to do" (S7, female, 57) • *Scaffolding*: "I think they like the offered choice rather than deciding what to do themselves, I think they like to say oh this is on at this time, I'm going to do this, rather than making that decision themselves, you know what I mean? Because they can't think, oh, I better get dressed or washed today, let alone what do I do activity-wise?" (S2, female, 27) • "The struggle with the mental illness and the medication and the side effects and CPAs, you know, just the general busy nature of the ward, you know. I think they're really struggling with all of that without having to sort of take on, you know, making decisions, it feels like they want us to say this is what's available, what would you like to go to?" (S3, male, age undisclosed)
5: Improvement	N participants commented: 3/3 Focus group covered: 13.87%	N participants commented: 7/7 Focus group covered: 22.13%
Specific recommendations	• *Coping skills groups*: "like sort of groups dealing with stress… coping strategies and stuff like that" (I2, female, 31) • *Psychoeducational groups*: "groups to help us learn more about our illnesses" (I2, female, 31)	• *Theme nights*: "Patients loved those, when we used to do Spanish night, and an Italian night, or an Indian night" (S7, female, 57 • *Increased spontaneous interaction*: said: "I think if you got a spare five minutes or ten minutes of staff, go and sit with the patients even if it's just to watch the telly, you can find out more, engage more" (S1, female, age undisclosed)

Themes	Inpatients	Staff
	• *Individual therapy*: "…like the offer of at least however many weeks I'm here, a therapist, one-to-one to see me each week" (I1, female, age undisclosed) • *Afternoon mutual help meetings*: "Sometimes people aren't up in the morning, sometimes they have had disrupted sleep. There should be a morning and an afternoon group at some point in the week" (I1, female, age undisclosed) • *Increased spontaneous interaction*: "When spending time sort of like observing people, they could actually be spending time with loads of people helping them" (I2, female, age 31) • *More one-to-one:* "there needs to be somebody on emergency one-to-one, so that it stops escalations and moods don't go up and down" (I1, female, age undisclosed). • *More off-ward activities*: "Sometimes I feel I want to go out, go out together to have I don't know, two days a week of, like two days a week of going out together, like swimming" (I3, male, 18)	• *More off-ward activities (contradictory):* "I know that we got criticised for taking patients out for the day because it's an acute psychiatric and it's not a rehab" (S1, female, age undisclosed)
Increased responsiveness	*Gender:* • "to discuss the way we're viewed as women would all just be very helpful" (I1, female, age undisclosed) • "I find, some of the men slightly aggressive, not aggressive but, and older women, they don't have a lot of tolerance" (I1, female, age undisclosed)	*Gender:* • "maybe… something for the men. Maybe something needs to be a men's group" (S3, male, age undisclosed) • "DIY, something like woodwork" (S4, male, 29) • Activity provision for men already better than previous years "because we've got more input, a lot more choice" (S7, female, 57) *Level of wellness:* • "We can go through phases…We've got quite well patients that you know, participate in activities and then those to be discharged and then we get input of quite unwell patients, difficult to engage in activities" (S7, female, 57)

Themes	Inpatients	Staff
		• "I think went it comes to activities it has to depend on several things…how well your patients are and how many of them would be able to do that activity" (S1, female, age undisclosed)
Increased resources	• "I think perhaps because there isn't enough 5 minutes spaces for the staff to go outside and have a breather, you know, there's a seat down there, go out sit down there for 5 minutes, have their iPods to listen to, something. Then come back to the ward, that would mean that they would all function better" (I1, female, age undisclosed)	• "More resources in the staff, perhaps funding depending on what activities people wanted to approve" (S5, male, 35) • "less paperwork and more funding would be good. Less paperwork to free up more time" (S7, female, 57) • More staffing could mean "more escorting out, we could get people off the ward more…you get staffing levels right, then there's more opportunities for other creative activities…and enrich the environment, which ultimately improves the inpatient experience of the patients that we're here to support" (S3, male, age undisclosed)
Improved communication	• "when they shut the door in your face they never make sure there's somebody outside on the ward to talk to…because often maybe 4 or 5 of them in there having a talk or a changeover but they don't say right, we're just gonna, if you need to talk to anyone, you can talk to one of these guys, they never reassure you of that. Yeah, they go in for handover and they don't care less when you're on the outside… That's how it feels because of the way their body language is" (I1, female, age undisclosed)	• Simply asking inpatients more about their interests could improve engagement: "people don't really open up to you unless you ask" (S2, female, 46) • "I'll tell you what is good is that EI recently, have started coming more on the ward and taking people out. It'd be good if all the community teams could… it'd be more integrated, the service…so it's a more seamless move from inpatient to community or the other way around…More of a relationship" (S2, female, 46)

Theme 1: Preferred activities. Inpatients discussed this relating to which activities they preferred, whereas staff discussed this relating to both themselves and what they thought inpatients liked best (see Table 5).

Similarities. Activities reported as liked by inpatients by both groups included: cooking, gym, healthy living/diet/eating, and going out.

Differences. Inpatients also stated liking art, games, and general activities; whereas staff (relating to themselves) mentioned liking mutual help meetings and relaxation. Staff also described inpatients liking relaxation and pottery; these were not mentioned by inpatients. Indeed, pottery was the only activity negatively described by inpatients – mainly due to it being experienced as difficult. Similarly, staff commented they believed cinema was one activity inpatients did *not* like because

> *"people are so poorly, they find it hard to sit and concentrate for a period of time on a film"* (S2, female, 46).

Table 5

Theme 1: Preferred Activities

Focus group	Activities reported (N)
Inpatients about self	Art (1), cookery group (1), everyday activities (1), games (3), gym (2), healthy living/diet (1), leave (supported/unescorted; 2)
Staff about self	Cooking (1), mutual help meeting (1), relaxation (1)
Staff about inpatients	Breakfast club (1), cooking (2), going out for coffee (1), going out to the farm (1), gym (1), healthy eating (1), relaxation (1), pottery (1)

Note. N: total number of separate times mentioned, by different or same participants

Theme 2: Activity benefits.

1) Social connection. Inpatients associated this with feeling included (two participants using the word "family"), getting to know people, sharing skills and accomplishments, and raising each other's spirits – including of staff. Inpatients distinguished this from experience of social connection outside the ward. S3 (male, age undisclosed) indicated this is also experienced by staff, associating this with "being human".

2) Discharge preparation. Both groups discussed this in terms of recovery, a general re-engaging with and

> *"progress[ing] through society"* (I3, male, 19),

and for one inpatient

"reminding me of being proactive in life" (I3, male, 19).

Two staff more directly attributed possibilities for re-engagement to activity continuation beyond discharge. It could be argued SW might be too successful in this domain. Both groups described inpatients sometimes not wanting to leave (e.g. due to being worried or feeling "in a bubble" when on the ward). Unsurprisingly, discharge preparation was described as not always going to plan, including regarding developing better coping mechanisms and preparation for return to work.

3) Skill development. Staff mentioned this both in terms of helping inpatients develop *new* skills and building on *old* skills. An inpatient similarly discussed building up lost skills (e.g. cooking) with staff support, and learning new skills from fellow inpatients.

4) Distraction. Three staff, but no inpatients mentioned distraction (i.e. from "troubling thoughts"). One staff indicated not all colleagues might share the view distraction is beneficial.

5) Managing mood, emotions, and behaviour. The one inpatient who mentioned this as a benefit related it to a specific behaviour (aggression). Staff discussed this more broadly, indicating activity engagement can help manage various emotions and improve ward atmosphere. Staff also suggested emotion management through one-to-one interaction may reduce medication requests.

6) Other benefits. Additional benefits mentioned just once or twice included: raising good memories, normalising, and providing fun or enjoyment, hope, freedom, and time off-ward.

Theme 3: Challenges.

1) Lack of resources. This was the biggest subtheme for both groups, relating to negative effects of funding and staffing shortages. Staff attributed these to timetable gaps, difficulties in offering choice, problems providing activities (e.g. gym) due to not enough trained staff, and logistical complications going off-ward. One staff sometimes stayed late to compensate. Inpatients appeared aware of variability in activity types and quantity offered throughout the day, particularly evening gaps. Inpatients attributed activity irregularity and lack of one-to-one interaction to inadequate staffing, stating these happen *"because they haven't always got time"* (S2, female, 31).

Both groups also made positive comments regarding staffing compared to past levels and with other settings. One inpatient described a favourable difference between her current and previous stay, being particularly approving about the new OTs. Similarly, staff made affirming comments regarding new and more OTs and volunteers; lower patient-to-staff ratio; and favourable comparison to other wards. One staff implied an unexpected benefit of higher-banded staffing shortages is that *"it opens up to the HCAs doing a fantastic job of trying to engage with people"* (S3, male, age undisclosed).

2) Remit. Remit also presented challenges to activity provision in two ways. By staff only (particularly OTs), there was much discussion about the sometimes-conflicting roles they felt expected

to assume. They described these individual remit challenges affecting frequency and quality of one-to-one interaction and group provision.

Differences also appeared between staff and inpatient understanding of ward remit, including level of wellness expected of referrals. Certain staff were clear the ward is an acute setting for very unwell inpatients, making certain (e.g. off-ward) activities challenging or inappropriate. Conversely, inpatients asserted very unwell individuals *"shouldn't be on this ward"* because *"it unsettles the whole ward… makes us…feel all vulnerable"* (I2, female, 31) and wanted more off-ward activities.

3) Negative attitude. One staff described frustration about negative inpatient attitudes to some activities, especially after personally offering multiple activity ideas. Inpatients likewise made negative comments about staff attitudes, describing staff as 'deflated' and 'down'. However, both groups were not consistently negative, describing much variability in attitude.

4) Theft or damage. Inpatients asserted materials like board games must be kept locked up due to possible theft or damage. Staff raised similar examples, speaking about their effect on staff and inpatients. Staff had developed an expectation of this happening, affecting purchasing decisions regarding activity-related materials. S2 (female, 46), explained *"it would be quite nice to have a computer to use, but it'll be broken"*, impeding responsiveness to inpatient requests for laptop time.

Theme 4: Choice.

Experiences. Both groups described largely negative experiences regarding recent efforts to increase choice. One inpatient explained staff *"invite you to have better ideas to like better the ward"* (I2, female, 31), but felt their choices were not acted upon, including during nurse-led activity slots. They related this to staffing and time constraints. One staff attributed his largely negative experience to lack of patient response caused by mental illness. However, he also shared a successful experience of responding to choice, reporting *"things do subtly change"* (S3, male, age undisclosed).

Methods. Four staff made suggestions regarding how more choice could be offered. Two recommended posting public lists and inviting inpatients to write down activity requests. Three others suggested improving current practices, like more actively using OT interest checklists to follow up on interests and offering more spontaneous one-to-one activities. Two described the difficulty inpatients can have developing their own ideas, suggesting choice be scaffolded by offering a selection of options.

Theme 5: Improvement.

1) Specific recommendations.

Differences (see Table 6). One staff recommended a previous practice of organising theme nights not mentioned by inpatients. Inpatients suggested more psychotherapeutic activities like coping

skills and psychoeducational groups, and individual therapy (none mentioned by staff). Other inpatient recommendations included more indoor activities like crafts, educational opportunities (GCSEs or A-Levels; IT, English, Maths, food and hygiene certificates; and staff sharing knowledge from their training), work experience, laptop time, and more "mutual help" meetings. I1 (female, age undisclosed) particularly recommended more afternoon mutual help meetings, because some inpatients cannot get up in the morning. Whilst I1 suggested she would engage better with and appreciate afternoon meetings, S3 (male, age undisclosed) explained *"the people that attend to attend, are the ones able to get up and… able to function and to that degree. So they're the people that tend to be most motivated to attend activities"*. Inpatients also recommended more evening groups, even if just informal groups to discuss their day and help reframe negatives into positives.

Similarities. Both groups recommended increased one-to-one interaction, but particularly staff. One inpatient specifically described a need for this during emergencies. Both groups suggested more outdoor activities and time off-ward. Staff suggested more park picnics, visiting markets, doing more *"normal"* activities like attending the cinema, or *"even simple things like going over to the field for football"* (S1, female, age undisclosed). The latter two matched inpatients' recommendations for more football and "normalised" activities like cinema trips. Other staff disagreed cinema trips would be useful, based on past experience with low uptake and inpatient concentration difficulties. One staff warned against more time off-ward generally due to ward remit.

Table 6

Subtheme: Specific Activity-Related Recommendations

Focus group	Activity-related recommendations (N)
Inpatients	Coping skills groups (1), crafts (e.g. bracelet-making; 1), educational opportunities (7), employment preparation (1), football (1), independent living skill development opportunities (1), individual therapy (2), laptop time (1), more evening groups (1), more spontaneous interaction (1), more mutual help meetings (2), more time off-ward (1), psychoeducational groups (2)
Staff	More spontaneous interaction (5), more time off-ward (4), theme nights (1)

Note. N: total number of separate times mentioned, by different or same participants

2) Increased responsiveness. This included responsiveness to gender, age, and wellness. Both groups stated gender- and age-responsive activities would be beneficial, although groups expressed this differently. Gender-related remarks by inpatients centred around women. Conversely, staff stated needing more male-orientated groups, although most agreed male activity provision had already improved. Both groups remarked activity engagement and interest varied depending on the age range represented on the ward. Staff also related engagement and interest to level of wellness.

3) Increased resources. Staff related this to funding (e.g. for activity supplies, like cooking ingredients), training (e.g. more staff trained to facilitate gym), time (e.g. by reducing paperwork), but especially staffing levels (e.g. to provide time off-ward). Relating to funding, one staff commented:

> *"it'd be nice to have a pot somewhere so we could say right, we'll do this tonight, let's … do it"* (S7, female, 57),

suggesting this might improve spontaneity and responsiveness. Although inpatients mostly discussed this relating to the negative consequences of resource shortages, two suggested staff should try increasing resources more proactively, like through fundraising campaigns. One inpatient explained increasing personal time for staff could improve spirit and ward functioning, including activity facilitation and provision.

4) Improved communication. It was suggested activity engagement and skill-sharing could increase through improved communication, including between inpatients, between inpatients and staff, and between services. One inpatient suggested patients could learn skills from each other, but only if they know about each other what they can share. Similarly, staff suggested simply asking inpatients more about their interests could improve engagement. One inpatient also suggested staff communicate their availability more clearly, particularly during ward rounds. Staff remarked the Early Intervention team had recently taken some inpatients out climbing, suggesting improved service integration increases activity opportunities and results in

> *"a more seamless move from inpatient to community"* (S2, female, 46) and
>
> *"more engagement on discharge"* (S7, female, 57).

Feedback and Dissemination

Besides review by the Steering Group, results and recommendations were first fed back individually to the lead OT, including a report draft. The OT was pleasantly surprised by results considering current ward challenges and felt recommendations would be helpful to activity programme development. He was keen to schedule two feedback meetings for current inpatients and a staff feedback session during handover, both planned for summer 2017. Meanwhile, he has already responded to some recommendations (see Tables 7 and 8). For example, more staff are trained to facilitate gym (reducing cancelled gym sessions); psychotherapy groups have been re-introduced; and timetable gaps (particularly evenings gaps) are being filled. More response is expected following summer feedback sessions. The project will also be disseminated to current and discharged inpatients' carers via local organisations that organise meetings for this population. A lay summary poster will be put up on the ward and can be included on the AWP website and newsletter and emailed to local teams. It is hoped the study will be published in the nominated journal.

Discussion

The present study aimed to explore staff and patient perceptions of inpatient ward activities and reduce the gap in literature in this area.

Activity Benefits and Experience of Choice

Themes echo existing research and guidelines on psychiatric inpatient activity provision, including regarding activity benefits. Both groups reported activities can promote social connection (akin to the social relationship development demonstrated by Fieldhouse, 2003), skill progression (e.g. Mee and colleagues, 2004), managing mood (different but comparable to sense of control over symptoms; Breier & Strauss, 1983), and enjoyment (e.g. Jackman, 2016). Staff attribution of successful community reintegration to activity continuation fits with RCPsych's (2011) recommendation to maintain and integrate this into care plans so inpatients are better prepared for discharge. Participants also appeared to describe the RCPsych's (2011) report's prediction that not following this standard results in inpatients feeling "segregated from the outside world" (p.13). Inpatients vocalised strong delineations between "the community" and the "bubble" of SW; how SW can best respond to this would be beneficial to explore further.

The "challenges" theme corresponds with reports of the impact of reduced expenditure on mental healthcare (Marshall et al., 2011; Shek et al., 2009). Both groups strongly emphasised negative activities-related consequences, including timetable gaps, negative attitudes, practical difficulties going off-ward, offering adequate choice, providing sufficient one-to-one interaction, and offering psychological intervention. The latter two are particularly concerning considering recommendations for access to a comprehensive range of psychological intervention and daily one-to-one interaction with a mixture of multidisciplinary staff (RCPsych, 2011). Participants echoed the CQC's (2009) finding of timetable gaps occurring especially in the evening. Although not necessarily representative of other services, current findings are thus similar to previous reports and can provide more personal insight to commissioners and policy-makers into real-world consequences of difficult financial decisions. Fortunately, there was some indication SW is not at the extreme end of the pressure spectrum described by the CAAPC (2015), considering positive comments regarding resources were also made.

Best-Liked and Wanted Activities

Best-liked activities and improvement suggestions likewise appear to draw together issues highlighted in previous research. Activities reported as best-liked (e.g. cookery group, leave, and gym) and as missing but wanted (e.g. psychoeducational groups, employment preparation, and individual therapy) reflect breadth of activity categories recommended elsewhere. They include outdoor (e.g. leave) and indoor activities (e.g. cooking), occupational therapies (e.g. art, bracelet-making, employment preparation), and psychological intervention (e.g. psychoeducational groups and

individual therapy; RCPsych, 2011). Results also provided new insights into inpatient activities, extending previous recommendations for provision of *age*-appropriate activities to provision of *gender*-specific occupation. Indeed, to the authors' knowledge, this is the first study to qualitatively evaluate experience of inpatient activities, including specifically which activities staff and inpatients like best and they would most like implemented.

Similarities and Differences

Findings demonstrated similarities and differences between staff and inpatients. They agreed on several inpatient activity preferences, including cooking, gym, healthy living, and going off-ward. They also agreed on most of the possible benefits, like social connection, discharge preparation, skill development, managing mood, normalisation, and providing fun and freedom. Correspondence was also found regarding activity-related challenges and their impact, like lack of resources, remit, negative attitude, and theft or damage. They also reported comparable views regarding provision of choice – unfortunately mostly negative. Finally, they made similar improvement suggestions, including increased one-to-one interaction, off-ward activities, responsiveness, resources, and communication. These similarities demonstrate examples of good practice and areas for improvement that most staff and inpatients agreed on. They may therefore be particularly important targets for maintenance or development, respectively.

There were also differences. For example, only staff suggested reinstituting theme nights and only inpatients recommended more psychotherapeutic activities, laptop time, and educational and work opportunities. Only staff mentioned distraction as possible benefit; focussing on other benefits might thus be more beneficial to encourage inpatient activity engagement. To the lead author's knowledge, this is the first study to specifically compare staff and inpatient views regarding ward activities. However, disparity between groups might be explained by the reported need for improved communication between inpatients and staff. Power is another important issue for consideration. There is an inherent discursive and contextual power imbalance between staff and inpatients (Hodge, 2015). Although SU involvement has been high on the national and international agenda (Department of Health, 2011) and much covered within literature (McKeown & Jones, 2014; Molkenthin, 2017), it is described as often being tokenistic and difficult to implement due to this power imbalance (Slemon et al., 2017). SU involvement may be experienced as challenging the ability, position, and power equilibrium of staff, consequently ignored or shaped to fit service objectives. SU involvement thus not only requires government commitment, but commitment from staff and operational support from service managers (Slemon et al., 2017).

Limitations

Some limitations should be considered. First, generalisability outside this ward is limited. While this unit is likely not unusually dissimilar from others, differences in staff formation, activity

programme composition, and other care factors might produce other findings (Briscoe, McCabe et al., 2004). Indeed, even the unit's activity programme changes weekly; inpatient participants here might thus experience activities differently from past or future inpatients.

Small sample size and opportunity sampling possibly biased responses and limits conclusions and recommendations. However, small groups enabled individuals to develop confidence and build on each other's replies, which larger groups may prevent (Egan, Harcourt et al., 2011). It could be argued data saturation was not reached; further focus groups were unfortunately not possible due to resource and time constraints.

There was lack of ethnic and cultural variety, although this represents the local population. It is recommended future studies recruit greater diversity considering culture influences experience (Abramson, Trejo et al., 2002). There were also no inpatient participants older than their thirties; important considering feedback activities need to be age- (and gender-) responsive.

Furthermore, honesty was perhaps difficult due to social desirability. All participants were either working or staying on SW and most knew one other. Presence of an OT student at the inpatient group might have increased this difficulty. Staff participants might have found this difficult due to differences in perspective according to profession. Indeed, the OT suggested near the end of the group that they leave due to feeling others might be inhibited. Despite these possible difficulties, multiple perspectives were observed in the data and all present participated in the groups (albeit to varying degrees; see Appendix H).

Both groups could be influenced by the interviewer's perspective. Despite introductions to prevent this, inpatients might have viewed the interviewer as affiliated with SW, whilst staff might have feared judgment. Finally, mental health issues may have impeded inpatient communication. Two inpatients often digressed, including one who appeared to find it difficult to share their thoughts. The same inpatient left the group early due to feeling another's comments were directed at them. Attempts to manage were made by encouraging all inpatients to share; gently guiding participants back to the question; and clarifying any short or inconsistent responses (Carpenter & Tracy, 2015).

Research Recommendations

Further research exploring activities in inpatient mental health units is needed to continue developing evidence-based guidelines. Further qualitative research involving more inpatients and staff from different professional (e.g. HCAs) and ethnic backgrounds might provide a more inclusive picture of SW's activity provision. Interviews or focus groups with recently discharged inpatients and carers of previous inpatients would be useful – particularly to evaluate whether one proposed benefit (discharge preparation and community reengagement) is realised. Surveys could be constructed based on the themes to enable evaluation of implemented changes and capture views of other staff, inpatients, and

wards. In any case, more effort is required to initiate and appraise any new activities or activity timetables based on present recommendations.

Inpatient services vary greatly between regions (CAAPC, 2015). Similar studies in other services would improve understanding of inpatient activity provision and development. Corresponding with NICE recommendations, this could inform development of larger-scale RCTs comparing activities, programmes, and services to establish effectiveness and acceptability.

Clinical Recommendations

The overarching purpose was to contribute to SW activity programme improvement, motivate staff, and improve care by offering feedback on both current good practice and areas for improvement. Overall, findings should encourage SW: almost all participants expressed praise about activities and staff. These related to noticing efforts to improve activity provision and service generally; the positive impact of the new OTs; inpatients not wanting to leave the ward; current staff being more educated, giving more support, and spending more time talking to inpatients; and appreciation of all who attended the groups to share ideas and better understand each other (Carpenter & Tracy, 2015). Participants also reported several workable areas for improvement, like training more staff to facilitate activities and introducing certain activities into the timetable (see Tables 7 and 8). Recommendations may be challenging considering current resource shortages; burden on staff could be reduced through further development, implementation, and evaluation of recommendations by future trainee clinical psychologists.

Lay Summary and Conclusion

There has not been much research on psychiatric inpatient wards. However, it is important to know what staff and patients on these wards think about the activities that are offered to patients. Several reports have said wards need to improve their activity programmes. Some organisations have said more research is needed to better understand how to improve them. For these reasons, this project explored the views and experiences of staff and inpatients of activities in one ward. It did this through two focus groups: one with seven staff, and one with three inpatients. The project used thematic analysis to analyse the data, which showed five main themes: 1) *Preferred Activities,* 2) *Benefits,* 3) *Challenges,* 4) *Choice,* and 5) *Improvement*. Each theme had two to six subthemes. They were similar to what has been found in the limited previous research. Staff and inpatients talked about their best-liked activities and made suggestions for new activities. They also described how activities benefit them, how they experienced attempts to give patients more choice in the activities they do, and what gets in the way of providing a good activity programme. Both differences and similarities were found between staff and inpatients. Several recommendations were made to the ward, including what they should continue doing well and what to improve. Although the project is a good start, more research into inpatient ward activities is needed.

Table 7

Current Good Practice

Theme	Recommendation
Theme 1: Preferred activities (See Table 5) *Theme 2: Activity benefits*	*Continue offering the activities already well-liked by inpatients, especially those relating to reported benefits* (e.g. experienced as enabling social connection, discharge preparation, skill development, managing mood, and experienced as "normalising"). For these inpatients, this included cooking (well-liked by both inpatients and staff), gym, healthy living/diet/eating, mutual help meetings, art, games, and off-ward opportunities (i.e. going for coffee, to the farm, cinema, and personal leave).
Theme 4: Choice	*Continue promoting choice and collaborative practice* (corresponding with guidelines by NICE, 2009) The ward should continue reviewing and implementing proactive methods of involving and engaging inpatients, including continued efforts to offer choice and enabling inpatients to make informed choices about their care and experience, including activity engagement.
Theme 4.2: Choice methods	*Continue using interest checklists* It appears it is particularly helpful to scaffold inpatients' decision-making by offering a range of activity options to choose from, rather than relying on inpatients to develop ideas and decisions themselves. Besides informing activity choice, interest checklists can also continue to be used as useful conversation starters and thus encourage spontaneous communication and interaction with inpatients.
Theme 5: Improvement	*Continue striving to improve activity provision and the ward generally* This includes continuing to: place importance on meeting national guidelines and new research findings; hiring well-educated and qualified staff; and commissioning further service evaluations or consultancy projects by current staff or by future nurse or OT students, or trainee clinical psychologists.

Table 8

Areas for Improvement

Theme	Recommendation
Theme 3.1: Lack of resources *Theme 5.3: Increased resources*	Address the lack of resources *Staffing:* • *Train more staff to facilitate activities* Some activities are currently difficult to run if one staff member is off, like gym. Training more staff on how to facilitate these activities is important to improve timetable consistency. • *Set up meetings with other services to discuss how to improve integration* Integrating with other services could lead to increased activity provision and less burden on ward staff to facilitate certain activities (e.g. such as when EI took inpatients out climbing).
Theme 3.1: Lack of resources *Theme 3.3: Negative attitude*	*Time:* • *Provide opportunities for reflective practice and patient and colleague feedback* Some inpatients indicated not always getting along with all staff, referring to staff presence as "luck of the draw". Experiencing this can to a certain extent be expected in any setting due to natural differences in personality and approach, particularly in a pressured ward with high turnover and acutely unwell individuals. However, it is important staff are given the time and skills to recognise when this may occur so they can take appropriate action. Staff should be provided space to reflect on their work with patients and colleagues on a regular basis and be encouraged to actively seek patient and colleague feedback. Staff should be motivated to adjust their approaches accordingly, including by considering each patient's current wellbeing, preferences, strengths and weaknesses, and history. Staff should also feel enabled to raise any difficulties or learning needs in regular supervision so that these can be addressed. To decrease the experience of a "lack of spirit", it is important that staff are mindful about their attitudes when on the ward and that they are encouraged to take breaks for some headspace and to debrief with colleagues as and when needed (Carpenter & Tracy, 2015).

Theme	Recommendation
Theme 3.1: Lack of resources *Theme 5.3: Increased resources*	*Funding:* • *Organise a brainstorming session about fundraising* for the ward Perhaps liaise with individuals involved in previous Royal United Hospital (RUH) campaigns to discuss possible strategy.
Theme 2: Activity benefits *Theme 3.2: Remit* *Theme 5.4: Improved communication*	Address communication: • *Develop 'interests and skills' cards or passports for every staff member and inpatient* These cards could just contain a few bullet points to detail the type of knowledge individuals might be able to share. • *Train staff on ways to increase and improve spontaneous one-to-one interaction with inpatients,* particularly regarding their interests and hobbies and to promote choice Many staff reported having negative experiences of offering choice regarding activities, which can result in tokenistic offering of choice that can in turn be viewed as dismissive by inpatients. Brief prompts of key questions (e.g. listed on a small cue card) that staff can ask inpatients to promote choice and explore interests and hobbies should be developed. Staff should also plan semi-regular five to ten-minute "walk-arounds" or chats in their diary as is feasible per shift (e.g. at least one per shift; or at least one every 3 hours). • *Develop a booklet about the ward for inpatients and their carers* To engage more inpatients, improve communication, and reduce confusion about ward remit, the booklet should clearly outline (1) remit of the ward (e.g. as an acute service) and what this means in terms of level of wellness and activity possibilities; (2) all activities that are or have historically been on offer; and (3) the activity benefits that have been identified in the current report (and any others). Since activities change on a weekly basis, it will be important to clearly state in the booklet that not all activities are offered at all times. However, having a comprehensive list of past activities will make it easier for inpatients to consider ones they might like and request these. Even if some activities are not possible, it will at least give inpatients ideas to try in the community upon discharge, which can help give them a sense of mastery and agency over their future. • *Reiterate possible benefits at the start of each activity to encourage engagement* Staff should use the benefits highlighted in the current report to improvement engagement.

Theme	Recommendation
Theme 1: Preferred activities *Theme 4: Choice* *Theme 5.1: Specific activity recommendations* *Theme 5.2: Increased responsiveness*	Activity changes • *Provide more, and later, mutual help meetings* Mutual help meetings (i.e. joint staff-inpatient meetings) were regarded as important by both inpatients and staff, but some inpatients find it difficult to attend in the morning. At least some mutual help meetings should be offered in the afternoon, which can be achieved by alternating morning and afternoon meetings or at the very least offering an afternoon meeting once per week. These meetings should be clearly signposted. • *Introduce the activities suggested into the timetable* Suggestions included: organising theme nights, more types of crafts (e.g. bracelet-making; DIY or woodworking for men), educational opportunities, work experience, men- and women-only groups, younger- and older-people groups, informal evening chat groups focusing on reframing the day's negative into positive experiences, more psychotherapeutic groups (e.g. coping skills groups), more psychoeducational groups, and more individual therapy. • *Trial PPE-led activities* It was clear from findings that inpatients felt they could learn from each other, and co-facilitation of activities by People with Personal Experience (PPE) may be beneficial – not least as they can have additional credibility for current inpatients and serve as role models, but also because they could help address current staffing issues. • *Record activity requests and uptake of current activities in a specified document* Systematically recording data about activities will give a clearer picture to staff and commissioners about the type of activities that might need more funding, and provide concrete support for increased staffing requests. The document could include details like: activity name, activity type (e.g. outdoor, indoor; psychotherapeutic, occupational), dates and times offered, who facilitated the activity, attendance per day, feedback, and ideas for improvement.
Theme 3.4: Theft or damage	• *Review current safeguarding procedures regarding property* It is clear from both inpatients and staff that theft of and damage to property, especially those used for activities, is very frustrating. However, there were requests for more access to activity materials like laptops, books, and board games. It is important to try to meet these inpatient requests by reviewing the current safeguarding procedures in place and seeing whether these could be improved to prevent future incidents.

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Main Research Project

Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety

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Date of Submission: 21st June 2017

Word Count: 5447 words (not including contents pages, executive summaries, headings, tables, figures, appendices, and reference lists)

Journal: *Behaviour Research and Therapy*. The journal has been chosen due to recent articles on the relationship between paranoia and social anxiety, its orientation towards quantitative/experimental research studies, and having the highest impact factor amongst relevant journals (see Appendix I).

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Main Research Project

Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety

Classification systems traditionally distinguish "psychotic" from "anxiety" disorders (Gilbert, Boxall et al., 2005). Nonetheless, recent research demonstrates significant overlap. The relationship between social anxiety (SA) and paranoia has garnered particular attention. SA is characterised by disproportionate anxiety about social or performance situations, in which individuals fear being negatively evaluated (APA, 2013). Paranoia can range from strong delusions of conspiracy to slight distrust about others' objectives. Studies demonstrate high comorbidity between the two; a meta-analysis found pooled overall prevalence rates for SA in people who met criteria for "paranoid schizophrenia" at 15%, spanning 7-39% between studies (Achim, Maziade et al., 2011). Findings regarding other areas of overlap are more equivocal, including psychological processes and developmental pathways.

Psychological Processes

Some processes are shared between SA and paranoia, including threat experience and response, attentional processing, reasoning biases, and perception of social power. Both involve attending to others as sources of danger (Stopa, Denton et al., 2013), heightened self-awareness (Horton, Barrantes-Vidal et al., 2014), and hypervigilance to socially-threatening information (Gilbert et al., 2005). Self-referencing and confirmation biases are another commonality (Matos, Pinto-Gouveia et al., 2013).

Some suggest they differ in social threat interpretation and consequent social motive: SA individuals are motivated by the need to impress, whilst paranoid individuals are motivated to protect themselves from harm (Gilbert et al., 2005). SA has thus been conceptualised as self-focused, and paranoia as other-focused (see Figure 1). Other studies fail to find differences (Lopes & Pinto-Gouveia, 2013), or argue perceptual rather than affective responses differ between them: Freeman and colleagues (2008), for example, demonstrated that participants with SA responses to virtual environments were less disposed to internal anomalous experience than those with paranoid responses.

Developmental Pathways

Research also finds overlap regarding developmental pathways of SA and paranoia, particularly trauma experience (Michail & Birchwood, 2014). A review of social threat perception and paranoia indicates there may also be evolutionary neurobiological systems underpinning development of social threat detection in both (Green & Phillips, 2004). How much they are associated with interactions between neurobiology, aforementioned psychological processes, and trauma remains unclear [full review is outside this report's scope, but readers are directed to Green and Phillips (2004)

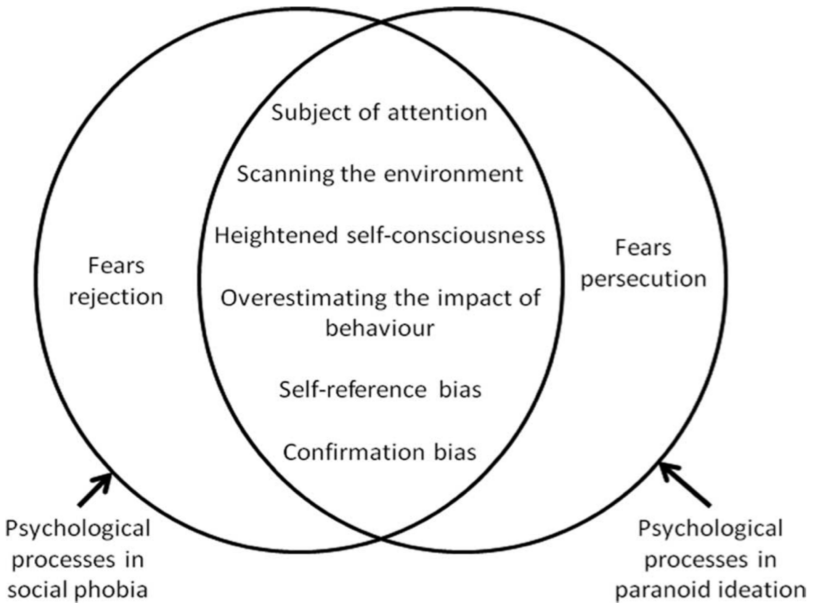

Figure 1. Overlap and differences of psychological processes in SA and paranoia as proposed by Rietdijk and colleagues (2009).

and Gilbert and colleagues (2005)]. Indeed, some studies do not find an association between SA and positive symptoms whatsoever (including paranoia; Birchwood, Trower et al., 2007); others only find one between SA and negative symptoms (Romm, Melle et al., 2012; Voges & Addington, 2005). Tone and colleagues (2011) suggest SA triggers paranoia in those who also experience low self-esteem, reasoning biases, perceptual aberrations, and tendencies to negatively appraise others. Yet another group postulates SA triggers paranoia only in those who have reasonable Theory of Mind (ToM) capacity, and some paranoia might be uniquely associated with affective processes and others with cognitive processes like ToM (Lysaker, Salvatore et al., 2010). More recent research concluded SA and attenuated positive psychotic symptoms (APPS; otherwise known as psychosis risk symptoms) might be related but non-overlapping phenomena, after finding Social Phobia Scale items did not load onto the Prodromal Questionnaire's paranoia/suspiciousness factor but were correlated with each APPS domain (Cooper, Klugman et al., 2016).

Freeman and colleagues (2005) gathered responses of 1202 non-clinical individuals to six online questionnaires evaluating paranoid thoughts alongside social-cognitive processes. They found enlistment of odder and rarer ideas accompanied rising endorsement of paranoid thoughts. Taylor and Stopa (2013) compared participants with SA, persecutory delusions (without SA), panic disorder, and non-clinical controls on measures of behaviour, automatic thoughts, underlying assumptions, and core beliefs. They found no differences between individuals with SA and with persecutory delusions. They concluded the latter may act similarly to the former when perceiving social threat, and experience thought patterns typically associated with SA. They also found no difference on paranoia scores

between the two and proposed persons with SA may experience increased paranoia, particularly during times of increased anxiety. However, this proposal is yet to be experimentally investigated. More recent research comparing adolescents with SA with healthy controls supported this, finding the degree of SA significantly predicted level of paranoia (Pisano, Catone et al., 2016).

Rationale

Most research evaluating the relationship between SA and paranoia has thus far either been cross-sectional or longitudinal in nature (Rietdijk et al., 2009) and focused on SA symptoms in individuals with psychosis (Birchwood et al., 2007) or comorbidity between trait-SA and trait-paranoia (Achim et al., 2011). No study has yet experimentally investigated Taylor and Stopa's (2013) assertion that heightened anxiety can temporarily shift individuals with trait-SA towards experiencing increased state-paranoia. Developing knowledge about the effects of heightened anxiety on paranoia in SA could not only contribute to existing theoretical frameworks regarding their relationship, but also clinically contribute to earlier and improved assessment, differential diagnosis, and treatment of both. Lack of understanding about their relationship and possible symptom fluctuation during heightened anxiety could, for example, result in inaccurate diagnosis (e.g. misdiagnosis of psychosis) and thus negatively impact treatment and outcomes (Pisano et al., 2016). Furthermore, therapeutic approaches for SA can potentially be modified for work with paranoia and vice versa if significant similarities between them are found (Freeman et al., 2008).

Aims and Hypotheses

The present study aimed to test Taylor and Stopa's (2013) suggestion that increased anxiety is affiliated with escalating paranoia by evaluating effects of an anxiety-task on state-paranoia and state-SA in three groups of individuals: those with clinical trait-SA (SA-group), those with both clinical trait-SA and trait-paranoia (SAP-group), and healthy controls (HC-group). The study aimed to answer the following research questions:

1) Does an anxiety-task increase state-paranoia in those who usually experience trait-SA without trait-paranoia? Does trait-SA predict state-paranoia?
2) How does this compare to controls and those who experience both trait-SA and trait-paranoia?

Based on previous research, it was hypothesised trait-SA would predict the effect of the anxiety-task on state-paranoia, with higher trait-SA resulting in increased state-paranoia.

It was also hypothesised that pre-anxiety-task:

- For state-SA, clinical groups would not differ significantly from each other. However, both would score significantly higher than controls.

- For state-paranoia, SAP-participants would score significantly higher than SA- and HC-participants, whilst SA- and HC-participants would not significantly differ from each other.

It was hypothesised that post-anxiety-task:

- For state-SA, hierarchy between groups would remain the same as before the task (i.e. clinical groups would not significantly differ from each other, but both would score significantly higher than controls).
- For state-paranoia, SAP-participants would still score significantly higher than SA- and HC-participants. However, SA-participants would score significantly higher than controls (thus experiencing more paranoid thinking).

Method

Design

A quasi-experimental design was employed with one between-subjects independent variable (comparison group) and one within-subjects independent variable (time before and after an anxiety-task). Comparison groups included: (1) individuals with trait-SA (SA); (2) trait-SA and -paranoia (SAP); and (3) healthy controls (HC). Paranoia-only participants were not recruited, as paranoia without SA is rare. Dependent variables encompassed continuous questionnaire scores at two time points (1: pre-anxiety-task and 2: post-anxiety-task). The primary dependent variable was state-paranoia. Secondary dependent variables included state-SA and state-affect. State-affect was evaluated due to being identified as covariate in previous research (Kramer, Simons et al., 2014).

Recruitment

Participants were recruited from multiple sources, including NHS services, third-sector organisations, and public advertisement.

Organisations. Clinicians were asked to: identify patients who experience SA, paranoia, or both; offer them a study information booklet*;* and request verbal consent for approach by the researcher. To allow adequate time for processing, patients were telephoned minimum 48 hours afterward to organise data collection (Lockett, 2011).

Self-referrals. Individuals also self-referred after seeing study adverts. Eligibility of self-referred individuals was checked at time of contact (Figure 2). Self-referred individuals seeing a mental health professional were asked verbal consent to approach the professional (usually Care Coordinator). The professional was asked whether their patient had capacity, was psychologically robust enough, and otherwise eligible to take part.

Self-referred individuals *not* seeing a mental health professional but who *were* experiencing mental health issues were asked risk screening questions and asked to write down their GP's contact details before data collection, so their GP could be contacted if the participant became distressed.

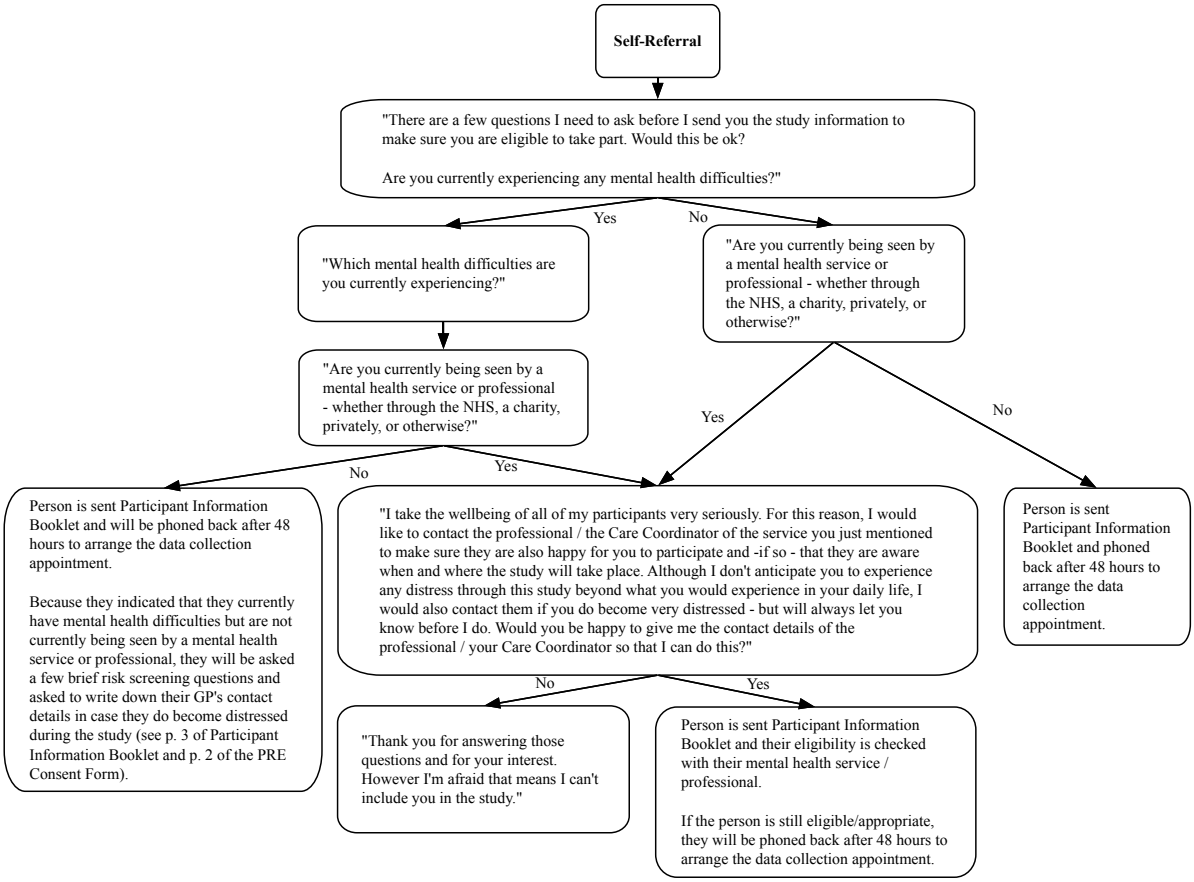

Figure 2. Self-referral eligibility and safeguarding procedure.

Inclusion and Exclusion Criteria

Table 1

Inclusion and Exclusion Criteria

Inclusion	Exclusion
• Age 18 or above • Current clinical levels of trait-SA and/or -paranoia for the SA and SAP groups • Manageable levels of risk • Contactable by phone • Ability to travel to experiment sites	• Being under age 18 • Current intoxication • Primary diagnosis of substance or alcohol dependency • Indication of brain damage or organic disorder • Moderate to severe learning disability • Insufficient fluency in English to complete measures or respond to the imagery interview questions • Being deemed acutely distressed • Lacking capacity to give informed consent • High risk to self or others

Data was to be analysed according to continuous scores of trait-SA, trait-paranoia, and trait-affect to evaluate whether these predicted the effect of the anxiety-task. Consequently, participants informally judged either by clinicians or themselves to have clinical SA and/or paranoia were recruited to the clinical groups and those informally judged to have no mental health difficulties were recruited as controls. Levels of SA and paranoia were confirmed during data collection through trait-measures (see *Materials*) to ensure good spread of SA and paranoia and guide further recruitment. The following cut-offs were used:

- SA-participants experienced clinical levels of SA, demonstrated by scoring above 58 on the *Social Anxiety Interaction* and *Social Phobia Scales* (as recommended by previous research; Heavens, 2015; Mattick & Clarke, 1998).
- SAP-participants experienced clinical levels of paranoia, demonstrated by scoring above 68 on *Green et al. Paranoid Thought Scales* (as recommended by its originators; Green and colleagues (2008) as cited in Lockett, 2011).
- Controls did not have clinical levels of SA or paranoia.

Participants

75 participants contacted or were contacted by the lead author[1] (41 self-referred, 21 approached, and 13 referred through professionals). 28 did not participate due to exclusion or drop-out (see Figure 3). Ultimately, 47 individuals participated: 12 SA-participants; 12 SAP-participants; and 23 controls.

[1] The total number of individuals who saw (i.e. through adverts) or were given (i.e. through professionals) study information is unknown for clear reasons.

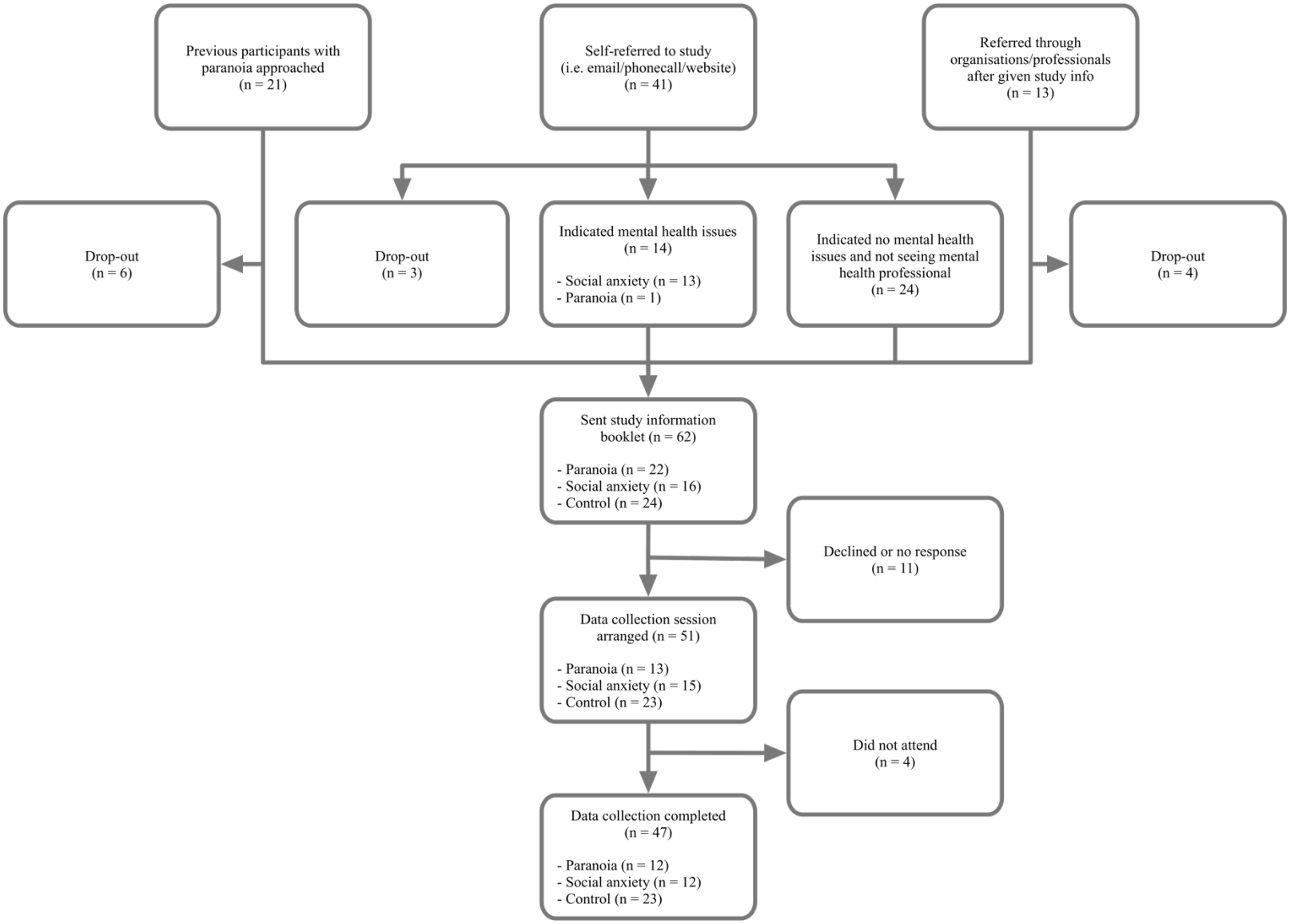

Figure 3. Flow diagram demonstrating participant recruitment to and exclusion or drop-out from the study

Materials

Socio-demographic and clinical characteristics. A brief questionnaire (Appendix K) was developed to gather basic information, including age, ethnicity, education level, and mental health diagnoses.

Trait-symptomatology.

Table 2

Standardised Materials Used to Measure Baseline Trait-Symptomatology

Domain	Measure
Trait-SA	*Social Interaction Anxiety* (SIAS) and *Social Phobia Scales* (SPS; Mattick & Clarke, 1998) Two 20-item self-report scales were used to measure trait social anxiety. Each item is scored on a five-point Likert-type scale ranging from zero ('Not at all characteristic or true of me') to five ('Extremely characteristic or true of me'). Clinical scores are calculated by summing up all items. A total score above 58 can be considered a clinical cut-off. The measure has good construct and discriminant validity (as shown by differences between non-clinical and clinical samples, including individuals with simple phobia, agoraphobia, and social anxiety). The questionnaire also has high test-retest reliability (α=0.92) and internal consistency (α=0.93 in social anxiety sample; Mattick & Clarke, 1998; Heavens, 2015).

Domain	Measure
Trait-paranoia	*Green et al. Paranoid Thought Scales* (Green et al., 2008) Trait-paranoia was assessed by the self-report *GPTS* which includes two 16-item subscales: one evaluating ideas of persecution and the other of social reference. Each item is scored on a five-point Likert-type scale ranging from 1 (*Not at all*) to 5 (*Totally*) as pertaining to the past month. Clinical scores are calculated by summing up both subscales, producing a number between zero and 160. Scores can also be calculated across three dimensions including eight items each: conviction, preoccupation, and distress. Although the GPTS was designed to measure paranoia along a continuum, a total score of 68 can be considered a clinical cut-off (Lockett, 2011). The questionnaire has good sensitivity to change (effect sizes between -0.24 and -1.0, Green et al., 2008) and internal consistency (Chronbach's α between 0.69 and 0.95 for the non-clinical and 0.68 to 0.90 for the clinical group; Green et al., 2008). It also has highly significant test-retest reliability (intra-class correlation coefficient = 0.87 for total score; 0.81 for the persecutory subscale; 0.88 for the social reference subscale; Green et al., 2008). Convergent and concurrent validity have also been evidenced for both subscales, which are significantly correlated with other measures of paranoia (including the *Peters et al. Delusions Inventory* (Peters, Joseph et al., 1999) and the *Paranoia Scale* (Fenigstein & Vanable, 1992); Green et al., 2008).
Trait-affect	*Depression Anxiety Stress Scales – Short Version* (*DASS-21;* Lovibond & Lovibond, 1995) Trait-affect was evaluated by the *DASS-21,* a 21-item questionnaire with three subscales of seven items each measuring symptoms of depression, anxiety, and stress over the past week. Each item is scored on a four-point Likert-type scale ranging from zero ("*Did not apply to me at all*") to three ("*Applied to me very much or most of the time*"). Scores are calculated by summing all items. All subscales have good internal consistency [α = .82 to .93; (Brown, Chorpita et al., 1997; Henry & Crawford, 2005)]. The measure is included in this study as it has been demonstrated affective processes contribute to the occurrence of both social anxiety and paranoia (Freeman et al., 2008).

State-symptomatology. Three self-report visual analogue scales (*VAS*) were developed to measure state-symptomatology immediately before and after the anxiety-task due to lack of appropriate standardised measures (Table 3; Appendix K). However, all scales were based on previously published questionnaires. For each item, participants were asked to rate how they were feeling "right now" from

0 (Not at all) to 100 (Totally) by placing a mark on a 100mm line, allowing a score to be assigned (e.g. 50, 75). *VAS* are highly sensitive to change (Freeman, Emsley et al., 2015).

Table 3

Visual Analogue Scales (VAS) Used to Measure State-Symptomatology

Domain	Measure
State-SA	The 6-item *Visual Analogue Scale – Social Anxiety* (*VAS-SA*), based on the daily *State Social Anxiety* questionnaire (Kashdan & Steger, 2006).
State-paranoia	The 6-item *Visual Analogue Scale – Paranoia* (*VAS-P*), based on the *VAS* used by Freeman and colleagues (Freeman et al., 2015).
State-affect	The 7-item *Visual Analogue Scale – Affect* (*VAS-A*), based on the *DASS-21*(Lovibond & Lovibond, 1995).

Anxiety-Task. An anagrams task was used to elicit mild evaluative anxiety (Bentall & Kaney, 2005). It has previously been used in educational, sports, and social contexts (Zeidner, 1998). It evokes mild anxiety without significant loss of engagement (Bentall & Kaney, 2005; Matthews, Emo et al., 2006; Wood, Bentall et al., 1994). It includes fifteen anagrams, twelve soluble (e.g. OYT) and three insoluble (e.g. LSIDTL), typed in the centre of separate cards. There are three three-letter anagrams, three four-letter anagrams, two soluble and one insoluble five-letter anagrams, two soluble and one insoluble six-letter anagrams, and two soluble and one insoluble seven-letter anagrams.

Procedure

Following recruitment and eligibility confirmation, data collection happened at a location chosen by the participant: a clinic room at the service providing their care (n=16) or the University of Bath (n=31).

On arrival, the information booklet was reviewed and another opportunity given for further questions. Participants were reminded they did not have to take part, and they could take more time to decide about their participation if they wished. Participants were asked to sign a consent form if they agreed to participate. They were also asked to provide their GP's details if they indicated they were experiencing mental health difficulties but not seeing professionals.

Participants completed the short demographic questionnaire before filling in measures evaluating trait-symptomatology (*SIAS/SPS, GTPS, DASS-21*), taking maximum 20 minutes. Participants then completed three VAS regarding state-SA, state-paranoia, and state-affect (taking

maximum 3 minutes). Participants were then asked to work on a "problem-solving task", actually used to induce mild anxiety. They were instructed as follows: "I have here some cards with letters on them. When the letters are rearranged, they spell a word. The words will be easy to start with but will gradually get a little more difficult. There are 15 words in total. Please look at each card and try to decide what the word should be. When you think you know the answer or want to take a guess, please let me know verbally as you are not allowed to write anything down. Please try to solve all the words. You have 15 minutes to work on this problem. I will tell you when time is up". The timer was set in front of participants, but not visible during the task. Participants were shown each card successively and could proceed at their own pace. Prompts were given if they gave up too easily (e.g. "Please try a little longer", "Think about it for a little longer", "I'm sure you'll solve it if you try a little longer"). Participants were told to stop after 15 minutes (adapted from Bentall and Kaney, 2005, p.479). Participants then repeated the three *VAS*.

Participants were offered an opportunity to participate in a relaxation exercise as pleasant way of ending. Participants chose from three exercises (see Appendix K), all lasting approximately five minutes. Participants were finally given verbal and written debriefing information, including regarding the anxiety-task's true purpose. After being made aware of this deception, participants were given the opportunity to ask questions and sign another consent form giving the option to withdraw; none chose to do so.

Participants were thanked and paid for their participation. A summary of findings will be sent to participants who wish to receive them. Participation lasted up to 1.5 hours in total (see Figure 4).

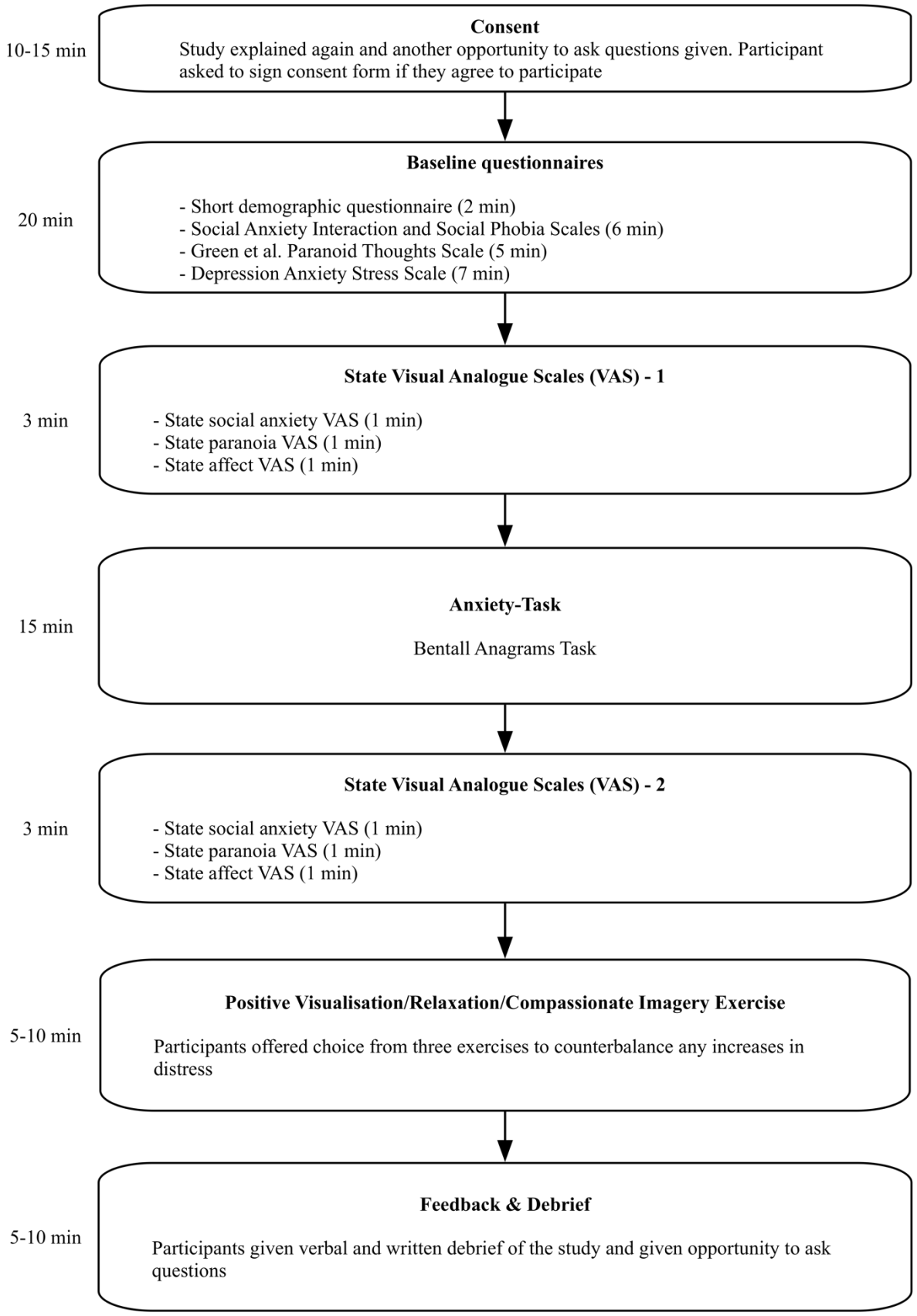

Figure 4. Study flow chart

Ethics and Service User Involvement

The study received favourable opinion by the Wales Research Ethics Committee 2 and Health Research Authority (reference: 16/WA/0362), University of Bath Psychology Research Ethics Committee (reference: 16-253), and 2gether and AWP NHS Research and Development departments (see Appendix J).

Four People with Personal Experience (PPE) were consulted: one provided input on the study proposal and three others piloted the study (including two versions of the anxiety-task). Design and materials were amended according to their feedback.

Data Analysis Plan

Data were statistically analysed using IBM Statistical Package for Social Sciences (SPSS) Version 24, according to an *a priori* plan developed with two statisticians and academic supervisors. Unless otherwise specified, an alpha level of .05 (two-tailed) was used.

Data preparation. Participants referred to the clinical groups did not always meet trait-criteria. Four of the twelve referred to SAP did not meet trait-paranoia cut-off, although one exceeded SA threshold. Two of the twelve referred to SA did not meet SA threshold. One of the 23 self-referred controls exceeded the paranoia threshold whilst three exceeded the SA threshold. Following research group discussion, participants were grouped according to trait-scores rather than original referral. The sample finally included twelve SAP-participants, ten SA-participants, and 25 controls. To provide more stable measure of trait-affect, a composite was formed with unit-weighted z-scores of constituent DASS-21 subscales.

Data screening.

Missing data. Missing data was examined through Missing Value Analysis. There were five missing values (one for age, one for trait-stress, two for trait-SA, and one for trait-paranoia) across four cases, accounting for 0% of outcome variables (i.e. state-scores). Evaluation did not reveal a pattern of missingness across data. Missing data was discussed with the research group and statistician. It was agreed to exclude cases pairwise due to the limited amount of missing values and to avoid unnecessarily limiting sample size. Sensitivity analysis confirmed replacement by the mean did not produce significant differences to pairwise exclusion.

Parametric assumptions and outliers. Data were screened for outliers, and parametric assumptions (e.g. normality, skewness, kurtosis, and homogeneity of variance) were explored by plotting histograms, probability-probability plots, and conducting Kolmogorov-Smirnov and Levene's tests. Outliers were found and many variables were not normally distributed across groups.

Bootstrapping (i.e. estimating properties of sampling distribution from the sample data) was therefore used during all analyses. For multiple linear regression (the main analysis) it is the residuals that need to meet these assumptions rather than the raw data of outcome variables (Field, 2013).

Data analysis. Descriptive statistics were used to examine socio-demographic and clinical characteristics of each sub-sample. Fisher's exact tests (due to expected frequencies below five) were conducted to evaluate differences between groups according to categorical variables, including gender, ethnicity, marital status, education level, employment status, and religion. Due to small sample size, levels of certain sociodemographic variables were collapsed to reduce probability of missing significant differences. Variables were collapsed as follows: White ethnicity versus other ethnicity; single versus partnered; university qualification versus lower qualification; employed/student versus other employment status; atheist versus other religious.

One-way Analyses of Variance (ANOVAs) and Games-Howell (due to most group variances being unequal) *post hoc* comparisons determined whether there were differences between groups regarding continuous variables, including age; trait-affect (including stress, anxiety, and depression), trait-SA, and trait-paranoia; and state-affect, state-SA, and state-paranoia.

Dependent/paired-samples t-tests evaluated whether state-scores differed before and after the anxiety-task.

Analyses were also conducted to determine possible confounding effects. Independent-samples t-tests, corrected for multiple comparisons using Bonferroni, assessed whether there were differences in predictor (trait-SA, trait-paranoia, trait-affect and pre-task state-symptoms) or outcome (post-task state-paranoia) variables between groups. Pearson's product-moment correlations assessed potentially confounding effects of age on predictor (trait-SA, trait-paranoia, trait-affect and pre-task state-symptomatology) and outcome variables (post-task state-paranoia).

Multiple linear regression analyses were run in which all predictors deemed theoretically important (trait-SA, trait-paranoia, trait-affect, and pre-task state-SA, state-paranoia, and state-affect) were entered into the models to determine which contributed substantially to the model's ability to predict outcome. Analyses were rerun once important variables were established (Field, 2013). Maximum four predictors were entered per analysis to reduce risk of overfitting (following the ten cases per predictor rule for sample size of 47; Field, 2013). No analysis revealed two or more significant predictors, so standard (forced entry) multiple regression analysis was used. Parametric assumptions (i.e. normality, linearity, multicollinearity, and homoscedascity) were assessed. This confirmed assumptions were violated for regression residuals, so bootstrapping was used. Adjusted R^2 (ΔR^2) is reported due to providing better estimate of the true population value when sample size is small (Pallant, 2013).

Power. *A priori* power analysis through G*Power v3.1 (Faul, Erdfelder et al., 2007) originally demonstrated 75 participants were required to attain moderate effect size of 0.25 (based on previous studies; Bullock, 2014; Lockett, 2011), with power of 0.8 (the generally accepted minimum) and an ideal α error probability of 0.05.

Results

Participant Characteristics

Socio-demographic. The final sample included fewer men (N=17; 36.2%), and more White (N=37; 78.7%) than other ethnicities. The majority were students (N=30; 63.8%), atheist (N=23; 48.9%), single (N=38; 80.9%), and had achieved an A-Level or equivalent (N=22; 46.8%; see Table 4).

Table 4

Socio-Demographic Characteristics

Characteristic	Total sample	Healthy control	Social anxiety	SA-Paranoia	Statistics*	
					Cramer's V	p
No. of participants	47	25	10	12		
Age: M (S.D.)	28.3 (11.9)	24.4 (5.9)	31.8 (18.5)	33.2 (12.6)	Welch's F(2,14.94)=3.11, p=.07*	
Gender, female: N (%)	30 (63.8)	16 (64)	6 (60)	8 (66.7)	.11	.96
Ethnicity: N (%)					.2	.41
White-British	31 (65.9)	16 (64)	6 (60)	9 (75)		
White-Other	6 (12.8)	2 (8)	2 (20)	2 (16.7)		
White & Black Caribbean	1 (2.1)	1 (4)	0	0		
White & Asian	1 (2.1)	1 (4)	0	0		
Other mixed	1 (2.1)	1 (4)	1 (10)	0		
Indian	1 (2.1)	1 (4)	0	0		
Pakistani	2 (4.3)	1 (4)	0	1 (8.3)		
Chinese	3 (6.4)	2 (8)	1 (10)	0		
Arab	1 (2.1)	1 (4)	0	0		
Marital status: N (%)					.27	.17
Single, never married	38 (80.9)	22 (88)	6 (60)	10 (83.3)		
Married/partnership	6 (12.8)	2 (8)	3 (30)	1 (8.3)		
Divorced	3 (6.4)	1 (4)	1 (10)	1 (8.3)		
Highest level of education: N (%)					.09	.86

Characteristic	Total sample	Healthy control	Social anxiety	SA-Paranoia	Statistics*	
					Cramer's V	p
Pre-GCSEs or equivalent	1 (2.1)	1 (4)	0	0		
GCSEs or equivalent	3 (6.4)	0	2 (20)	2 (16.7)		
A-Level or equivalent	22 (46.8)	14 (56)	4 (40)	4 (33.3)		
Undergraduate degree	10 (21.3)	4 (16)	1 (10)	5 (41.7)		
Postgraduate degree	9 (19.1)	5 (20)	3 (30)	1 (8.3)		
Doctoral degree	1 (2.1)	1 (4)	0	0		
Employment status: N (%)					.49	.003
Employed	6 (12.8)	4 (16)	2 (20)	0		
Unemployed, looking for work	2 (4.3)	1 (4)	1 (10)	0		
Unemployed, not looking for work	3 (6.4)	1 (4)	0	2 (16.7)		
Student	30 (63.8)	19 (76)	6 (60)	5 (41.7)		
Retired	1 (2.1)	0	1 (10)	0		
Unable to work	1 (2.1)	0	0	1 (8.3)		
Voluntary	1 (2.1)	0	0	1 (8.3)		
Other	3 (6.4)	0	0	3 (25)		
Religion: N (%)					.127	.74
Atheist	23 (48.9)	12 (48)	6 (60)	5 (41.7)		
Christian	17 (36.2)	11 (44)	4 (40)	2 (16.7)		
Buddhist	1 (2.1)	0	0	1 (8.3)		
Hindu	1 (2.1)	1 (4)	0	0		
Muslim	1 (2.1)	0	0	1 (8.3)		
Wiccan	1 (2.1)	1 (4)	0	0		
Transcentionism	1 (2.1)	0	0	1 (8.3)		
Any other	2 (4.2)	0	0	2 (16.7)		

Note. M: mean, N: number, SD: standard deviation
*Welsh's F is reported when homogeneity of variance was violated (as indicated by Levene's test)

A one-way ANOVA demonstrated no significant difference in age across groups (Welch's $F(2,14.94)=3.11$, $p=.07$), although controls were somewhat younger (M=24.4; SD=5.9) than SA (M=31.8; SD=18.5) and SA-paranoia (M=33.2; SD=12.6) participants. There were no significant associations between group and: gender (Fisher's exact test; p=.96), ethnicity (Fisher's exact test;

p=.41), marital status (Fisher's exact test; p=.17), education level (Fisher's exact test; p=.86), and religion (Fisher's exact test; p=.74). There was significant association between group and employment status (Fisher's exact test; p=.003), which was broken down with standardised residuals. These demonstrated significantly more SA-paranoia participants than expected had an employment status other than 'employed or student' (z=2.5, p<.05).

Clinical. Trait-symptomatology alongside differences between state-scores before and after the anxiety-task are presented in Table 5. One-way between-subjects ANOVAs confirmed trait-scores significantly differed between groups (all p<.005). Controls scored significantly lower than both clinical groups on all trait measures, whilst SAP-participants scored significantly higher for trait-paranoia than SA-participants. SAP-participants also scored non-significantly higher than SA-participants for trait-SA, whilst SA-participants scored non-significantly higher for trait-paranoia than controls. Trait-affect was significantly different between groups, with SAP-participants scoring higher than SA-participants for all three subscales. SA-participants scored higher than controls, except for trait-depression.

Table 5

Clinical Characteristics (i.e. Trait-Scores) and State-Scores Per Comparison Group

Scale & subscales	Total sample	Healthy control	Social anxiety	Paranoia	Statistics*		
					F	df	p
Total trait-social anxiety: M (SD)	53.11 (34.19)	25.5[a] (12.62)	83.6[b] (18.67)	85.64[b] (23.24)	67.51	2, 42	.001
Social interaction anxiety	31.29 (18.13)	16.67[a] (7.28)	47[b] (11.89)	48.91[b] (9.82)	66.97	2, 42	.001
Social phobia	22.3 (17.68)	8.72[a] (6.72)	36.6[b] (10.16)	38.67[b] (15.08)	46.43*	2, 16.43	.001
Total trait-paranoia: M (SD)	55.62 (23.24)	43.6[a] (8.8)	46.1[a] (12.36)	88.58[b] (19.2)	28.82	2, 16.79	.001
Conviction	13.74 (5.64)	11.2[a] (2.79)	11.4[a] (2.76)	21.64[b] (5.24)	36.52	2, 43	.001
Preoccupation	14.21 (6.94)	10.4[a] (2.5)	12.9[a] (3.9)	23.25[b] (7.2)	18.22	2, 15.96	.001
Distress	14.09 (7.25)	10.32[a] (2.29)	11.5[a] (3.5)	24.08[b] (7.13)	20.56	2, 15.94	.001
Total trait-affect: M (SD)	19 (12.91)	10.8[a] (6.57)	19.8[b] (9.36)	36.91[c] (6.79)	49.08	2, 43	.001

Scale & subscales	Total sample	Healthy control	Social anxiety	Paranoia	Statistics*		
					F	df	p
Depression	6.81 (6.48)	3.44[a] (3.8)	5[a] (4.97)	15.33[b] (3.93)	35.19	2, 44	.001
Anxiety	4.85 (4.16)	2.04[a] (1.57)	5.6[b] (2.76)	10.08[c] (3.53)	31.97*	2, 15.91	.001
Stress	7.83 (4.46)	5.32[a] (3.52)	9.2[b] (3.16)	12.27[b] (3.38)	16.87	2, 43	.001
Total state-symptomatology pre-task: M (SD)	25.89 (22.28)	11.48[a] (11.46)	28[b] (7.89)	54.17[c] (19.75)	40.75	2, 44	.001
Pre-state social anxiety	40.68 (27.96)	23.6[a] (21.19)	50.2[b] (19.56)	68.33[b] (19.92)	20.57	2, 44	.001
Pre-state paranoia	11.7 (22.29)	1.2[a] (4.39)	8[a] (15.49)	36.67[b] (29.95)	8.74*	2, 13.78	.004
Pre-state affect	25.11 (25.36)	10[a] (10.4)	23[a] (14.94)	58.33[b] (23.29)	24.08*	2, 16.65	.001
Total state symptomatology post-task: M (SD)	26.96 (22.98)	12.68[a] (12.13)	27[b] (10.59)	56.67[c] (19.23)	40.10	2, 44	.001
Post-state social anxiety	43.19 (31.49)	25.2[a] (26)	58[b] (20.98)	68.33[b] (26.23)	14.17	2, 44	.001
Post-state paranoia	10.21 (21.12)	1.2[a] (3.32)	2[a] (4.22)	35.83[b] (29.38)	8.04*	2, 16.33	.004
Post-state affect	27.02 (27.18)	10.8[a] (12.56)	25[a] (15.8)	62.5[b] (23.79)	25.12*	2, 17.57	.001

Note. Means with dissimilar superscript letters significantly differ from each other

M: mean, N: number, S.D.: standard deviation

*Welsh's F is reported when homogeneity of variance was violated (as indicated by Levene's test)

Main Analyses

State differences pre-anxiety-task.

Paranoia. A one-way between-subjects ANOVA explored hypotheses that for state-paranoia before the anxiety-task: (1) SAP-participants would score significantly higher than SA-participants and controls, and (2) SA-participants and controls would not significantly differ. There was significant effect of group on state-paranoia, Welch's $F(2,13.78)=8.74$, $p<.05$. Games-Howell *post hoc* tests supported both hypotheses, with SAP-participants scoring significantly higher than both other groups

(which did not differ significantly). The difference between SA-participants and controls did approach significance (p=.53), with SA-participants scoring higher (M=8; SD=15.49) than controls (M=1.2; SD=4.39).

Social anxiety. Another one-way between-groups ANOVA demonstrated significant effect of group on state-SA before the anxiety-task ($F(2,44)=40.75$, $p<.001$). *Post hoc* results substantiated hypotheses that for state-SA: (1) SA-participants and SAP-participants did not significantly differ, but (2) both clinical groups scored significantly higher than controls. SAP-participants scored non-significantly higher (M=68.33; SD=19.92) than SA-participants (M=50.2; SD=19.56).

Anxiety-task manipulation check. Paired-samples t-tests evaluated whether the anxiety-task increased state-symptomatology overall. None approached significance (p>.05); the assumption the anxiety-task would significantly increase symptomatology was thus not met.

Table 6

State Visual Analogue Scale Scores Before and After the Anxiety-Task for All Groups Combined

State VAS & subscales	Pre-task *M (SD)*	Post-task *M (SD)*	Statistics* *t*	*df*	*p*	*r*
Total state symptomatology	25.89 (22.28)	26.96 (22.98)	-.74	46	.47	-.02
State social anxiety	40.68 (27.96)	43.19 (31.49)	-.98	46	.33	-.04
State paranoia	11.7 (22.29)	10.21 (21.12)	.77	46	.49	.03
State affect	25.11 (25.36)	27.02 (27.18)	-1.1	46	.29	-.04

**Note.* Corrections for multiple testing (i.e. using Bonferroni) were made

Prediction of state-paranoia.

Preliminary analysis: Potential confounders. Independent-samples t-tests demonstrated no predictor variables differed significantly between genders, ethnicity, marital status, or religion. Most scores did significantly differ per collapsed employment status, corresponding with significant difference found through Fisher's exact tests for this variable between groups. Change in VAS-SA also significantly differed between lower and higher education level. However, none were significant after correcting for multiple testing using Bonferroni.

Pearson's product-moment correlation coefficients investigated relationships between predictor variables. Nearly all were significantly correlated, indicating medium ($r > .30$) to large ($r > .50$) positive relationships. It was not possible to control for these during regression due to small sample

size and to reduce risk of overfitting. Unfortunately this means it is more difficult to find more subtle differences and results may be affected by confounding factors.

Main analysis. Standard multiple linear regression assessed the individual ability of trait-SA to predict post-task state-paranoia, whilst controlling for trait-paranoia, trait-affect, and pre-task state-paranoia. The model explained 66.5% of the variance in state-paranoia following the anxiety-task (ΔR^2=.67) and was highly significant (p<.001). Trait-paranoia best predicted post-task state-paranoia, followed by pre-task state-paranoia, trait-affect, and trait-SA. However, none was significant. Results thus do not support the hypothesis trait-SA can predict paranoia following an anxiety-task.

Table 7

Standard Multiple Regression Analysis Predicting Change in State-Paranoia Due to An Anxiety-Task

Variable	B (confidence interval)	SE B	β	t	p
Trait social anxiety	0.03 (-0.06, 0.13)	0.06	.08	0.57	.56
Trait paranoia	0.51 (0.04, 0.74)	0.22	.76	5.38	.05
Trait affect	-0.94 (-3.86, 1.96)	1.31	-.16	-0.99	.53
Pre-task state-paranoia	0.18 (-0.09, 1.01)	0.22	.18	1.49	.32

Note. 95% bias has been corrected and accelerated confidence intervals are reported in parentheses. Confidence intervals and standard errors based on 1000 bootstrap samples

B=unstandardised Beta; SE=standard error; β=standardized Beta; t=test statistic; p=probability value

Discussion

Aims

The study aimed to test Taylor and Stopa's (2013) theory that heightened anxiety would result in temporary escalation of state-paranoia in those with trait-SA.

Key Findings and Links to Previous Research

State-scores *before* the anxiety-task. The two hypotheses regarding state-SA were substantiated: (1) clinical groups did not significantly differ, but (2) both scored significantly higher than controls. The two predictions regarding state-paranoia were also supported: (1) SAP-participants

scored significantly higher than SA-participants and controls, whilst (2) SA-participants and controls did not significantly differ from each other.

Effect of the anxiety-task. The assumption the anxiety-task would increase state-symptomatology overall was not met. Although state-affect and state-SA slightly increased, neither approached significance. Interestingly, state-paranoia slightly improved. There could be several reasons. The most straightforward is the anxiety-task was ineffective. Although it was used successfully in earlier studies and piloted, including with participants experiencing paranoia (Bentall & Kaney, 2005), some current participants (predominantly SA-participants) shared finding it less anxiety-provoking than and distracting from the preceding social interaction. An increase in state-scores for clinical participants prior the anxiety-task when meeting the researcher may have led to less opportunity for change. Others shared they guessed the task's true purpose. Conversely, many SAP-participants requested to stop the anxiety-task prematurely due to finding it *too* anxiety-provoking. It may thus be that this anagrams task is unsuitable for use with SA-participants. Another reason may be that the researcher was too reassuring or affable in their approach towards participants. Alternatively, *VAS* may have been unable to detect change due to lacking sensitivity and/or validity. However, *VAS* are recommended as highly change-sensitive measures (Dexter & Chestnut, 1995), including to measure state-paranoia and state-anxiety (Freeman et al., 2015). The current *VAS* were piloted and based on well-validated scales. Previous studies using anagrams tasks did not include a measure of the effect of the task (Bentall & Kaney, 2005); used the Symptom Emotion Checklist (SEC; Wood et al., 1994), based on a scale originally developed by Pennebaker (1982); or the 96-item Dundee Stress State Questionnaire (DSSQ; Matthews et al., 1999; Matthews et al., 2006).

Prediction of state-paranoia. Considering the anxiety-task's failed manipulation, it is unsurprising results did not substantiate the hypothesis trait-SA would predict state-paranoia following the anxiety-task. Due to failed manipulation, the anxiety-task was not a true test of Taylor and Stopa's (2013) proposal.

Results may also be influenced by underlying psychological processes. Research comparing responses of non-clinical paranoid with non-clinical SA individuals to failure and success demonstrated SA individuals experienced increased state-anxiety, but not increased state-paranoia in response to failure (Lopes & Pinto-Gouveia, 2013). State-paranoia *did* increase in response to success and receiving praise, despite initially showing positive bias towards people's intentions. It was suggested praise does not match negative self-image and is thus interpreted under "paranoid light" as mockery (Gilbert, 2001). Although the anxiety-task here was not used to produce feelings of failure nor success, participants perhaps perceived themselves as failing due to some anagrams being unsolvable – thus not producing the success necessary to increase state-paranoia. Higher state-paranoia *before* the task could be due to either fear of failure or of success (Lopes & Pinto-Gouveia, 2013).

Theory of Mind (ToM) may also have affected results. It has been suggested SA can lead to paranoia only when a certain degree of ToM exists, due to leading to expectations of behaviour as

guided by malicious intent (Lysaker et al., 2010). Others suggest ToM deficits (not capability) increases likelihood of perceiving others as threatening (Matos et al., 2013). It is not possible to exclude either from current findings, warranting further investigation.

It is possible only those with SA for whom shame experiences manifest as central autobiographical and traumatic memories experience temporarily increased paranoia during heightened anxiety. Previous research finds aversive experiences implicated in both SA and paranoia, but that paranoia may be more likely in those who experienced particularly traumatic shame (Matos et al., 2013). The current study did not evaluate shame or trauma so it is not possible to exclude their impact on results.

Strengths

This is the first study that aimed to experimentally evaluate Taylor and Stopa's (2013) hypothesis that increased anxiety leads individuals with SA to temporarily experience increased state-paranoia. Contrary to much previous research, the current study included individuals with clinical (rather than only sub-clinical) levels of SA and paranoia. It also included a control group to determine whether findings would be specific to clinical groups or whether state-paranoia would increase regardless. Groups were also well-matched regarding sociodemographic characteristics. Well-validated and frequently used measures of trait-SA, trait-paranoia, and trait-affect were used, enabling comparison with relevant studies.

Limitations

Sample and recruitment. Due to recruitment difficulties, analyses were underpowered and Type I and II error probability was increased (Field, 2013). Statistical methods (e.g. bootstrapping) were used to decrease this as much as possible. Although groups did not significantly differ regarding sociodemographic characteristics, they were not representative: participants were predominantly students, female, and White-British. The sample may thus not represent the general population (Bullock, Newman-Taylor et al., 2016), although studies do demonstrate suitability of conducting research in student populations regarding paranoia (Freeman, 2006) and SA (Stopa & Clark, 2001). Research does not suggest significant differences between genders or ethnicities regarding paranoia (Freeman et al., 2008), but studies demonstrate women with SA fear more social situations and function less well than men (Xu, Schneier et al., 2012).

Most participants self-referred – particularly controls. "Healthy" individuals who self-refer to this kind of study may be more predisposed to psychological disturbance (Freeman et al., 2005). Similarly, clinical groups may be biased towards psycho-socially "better" functioning participants due to excluding high-risk individuals and inherent problems collecting data on individuals who do not

engage (Thornicroft & Tansella, 2001). Findings merit replication in larger, more diversely recruited, and socio-demographically varied samples.

Data collection and design. All measures used self-report and may have lead to demand characteristics; trepidation about consequences of self-disclosure perhaps deflated responses (Tone et al., 2011). In efforts to prevent this, participants were asked to complete questionnaires by themselves and not watched whilst completing these. Trait-questionnaires diverged regarding timeframe: the *SPS* and *SIAS* evaluate SA without referring to timeframe, the *DASS-21* evaluates affect over the last week, and the *GTPS* evaluates paranoia over the last month (Cooper et al., 2016).

Statistical analysis. Multiple hypothesis testing was conducted and dependent variables were skewed, the former increasing Type I error probability and the latter leading to statistical power reduction (Freeman et al., 2008). Correlations were found between most questionnaires, but it was not possible to enter these into the model as covariates to reduce risk of overfitting due to lack of power. Data could be worked with further, for example by entering change scores (i.e. post- minus pre-task scores) into the regression model.

Research Implications

Results may differ with larger and more sociodemographically-varied samples (Lockett, 2011). A randomised trial conducted by independent assessors incorporating Bentall's Anagrams Task, a second anxiety-task (e.g. asking participants to prepare a presentation), and non-anxiety control task may enable firmer conclusions to be drawn. Future research could also consider the aforementioned processes that may influence the relationship between SA and paranoia (e.g. ToM, shame, failure and success responses). Besides further research on Taylor and Stopa's (2013) hypothesis, more studies are also needed to explore other theories regarding the relationship between SA and paranoia. More studies using longitudinal and prospective research designs, for example, may be useful to investigate pathways to SA and paranoia (Bullock, 2014).

Summary & Conclusion

The present study investigated the relationship between paranoia and SA. Specifically, it is the first attempt to experimentally assess whether increased anxiety may temporarily escalate state-paranoia in those with trait-SA. Contrary to previous research, results did not find an effect of anxiety-task on state-symptomatology. Although findings supported hypotheses regarding differences between state-SA and state-paranoia scores before the anxiety-task, they therefore did not substantiate the hypothesis that the anxiety-task would lead to increased state-paranoia for individuals with SA. Unfortunately, failed manipulation of the anxiety-task means the experiment was not a true test of Taylor and Stopa's (2013) hypothesis. Several possible reasons have been discussed, including that Bentall's Anagrams Task may not be suitable for SA and control samples. It is important to continue

evaluation of the relationship between SA and parnaoia, and Taylor and Stopa's (2013) theory. Trials with larger and more diverse samples involving randomisation to different anxiety-tasks may be particularly beneficial. Further research will hopefully continue to expand the evidence-base regarding the relationship between SA and paranoia, contributing to better-informed models of these constructs and leading to improved diagnosis and care.

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Executive summary of the Main Research Project:

Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety

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Date of Submission: 21st June 2017

Word Count: 664 words (not including contents pages, executive summaries, headings, tables, figures, appendices, and reference lists)

Executive summary of the Main Research Project:

Unpacking the relationship between social anxiety and state paranoia through experimental manipulation of state anxiety

Background

Research shows there is much overlap between social anxiety (SA) and paranoia. SA is characterised by disproportionate fear of being negatively evaluated by others in social or performance situations. Paranoia can range from strong delusions of conspiracy (e.g. that others are attempting to cause you significant harm) to slight distrust about others' intentions. Research finds that these conditions are often comorbid (i.e. they occur together in people).

Some studies find similar psychological processes are involved in both conditions, like seeing others as sources of danger and being very self-aware. Other studies find differences. For example, people with SA may be motivated by a need to impress others, while those experiencing paranoia may be motivated to protect themselves from harm. Research has also found similarities in the pathways that lead to these conditions, like similar underlying neurobiological systems and experience of trauma.

Several theories have been developed to explain the relationship between SA and paranoia. A relatively recent study proposed that individuals with SA might temporarily experience paranoia during times of increased anxiety. The current study aimed to test this by comparing three groups: (1) people experiencing clinical levels of SA, (2) people experiencing clinical levels of paranoia and SA, and (3) "healthy" controls (who did not experience either of these conditions).

Method

47 participants were recruited, including ten experiencing SA, twelve experiencing both paranoia and SA, and 25 experiencing neither. They completed one sociodemographic questionnaire (e.g. asking about age and ethnicity) and four questionnaires (*Social Anxiety Interaction* and *Social Phobia Scales*, *Green et al. Paranoid Thoughts Scale*, and *Depression Anxiety Stress Scale-Short Form*) to assess general (i.e. "trait") experience of SA, paranoia, and affect (including depression, anxiety, and stress). They also completed three short *Visual Analogue Scales* (*VAS*) that assessed their experience of SA, paranoia, and affect at that specific moment in time (i.e. their "state" symptoms) both before and after a task that was designed to cause mild anxiety (Bentall's Anagrams Task). The task required participants to solve 15 anagrams (i.e. letters that could be rearranged to form words), which were presented to them on separate cards. Participants were asked to solve as many as possible within 15 minutes, but three of the anagrams were actually unsolvable.

Results

Contrary to previous research, there was no significant difference between participants' SA, paranoia, and affect before and after the task. Results therefore did not show that the anxiety-task lead

individuals with SA to temporarily experience increased paranoia. However, this may have been because the anxiety-task was ineffective or because the *VAS* did not capture symptoms well enough.

Conclusions

This is the first study that aimed to experimentally evaluate the theory that individuals with SA may experience paranoia during times of heightened anxiety. It is also one of the first to include clinical groups of participants alongside healthy control participants. Unfortunately, the failed anxiety-task means that the experiment was not a true test of the theory. This might indicate that Bentall's Anagrams Task is not suitable for use with individuals with SA and healthy controls.

Implications

It is important for future research to continue evaluating the theory and the relationship between SA and paranoia generally. Studies with larger numbers of participants and using different anxiety-tasks may be particularly helpful. Further research will hopefully continue to add to the evidence-base about the relationship between SA and paranoia, leading to better-informed models of these experiences and improved diagnosis and treatment.

Connecting Narrative

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Date of submission: 21st June 2017

Word count: 3280 words (not including contents pages, executive summaries, tables, figures, appendices, and reference lists)

Connecting Narrative

Most of my pre-doctoral experience comprised service development work and research, and I was enthusiastic about continuing this on a course valuing these. Most ideas for my pre-doctoral work came from supervisors; although I learned much and enjoyed it, I sometimes lacked a full sense of ownership. I was therefore keen to develop my DClinPsy projects according to my own interests and address specific research skills I felt I lacked. Idea development according to these interests is part of the process I enjoy most: fitting with my "Reflector" and "Theorist" learning styles, I enjoy reading papers, learning about concepts behind practice, and noticing areas for further exploration. The final three research projects, alongside the case studies, explored a continuum: from theory underpinning practice (via the MRP), to formulation (CLR), intervention (case studies), and wider service provision (SIP). One theme running throughout this work is SU-involvement.

Service Improvement Project

Idea Development. Needless to say, I wanted the SIP to prove truly beneficial to a service. I was pleased an opportunity presented itself during first placement; the SIP was thus the first to take off. My placement supervisor (Jennie Boland) had shared the local inpatient ward (SW) was planning to recruit new OTs and had tried to improve patient choice in activity, but were uncertain how. Due to my interest in SU-involvement I did a brief literature search and found a paucity of research on inpatient activity provision, alongside a call by NICE for qualitative research. We developed ideas for a qualitative SIP and I was very enthusiastic: not only was it wanted by the ward; would involve patients, staff, and carers; and lead to specific service-related improvements; but it could contribute to the evidence-base and presented an opportunity to gain qualitative research experience. I approached Cathy Randle-Phillips for her expertise in qualitative research and SU-involvement and was pleased she agreed to supervise.

Within a few months, Katharine Christie helpfully took over as external supervisor as Jennie went on maternity leave. Fortunately, handover was smooth and ideas developed into a full proposal following meetings with Katharine, a Person with Personal Experience (PPE), and more thorough literature review. Difficulties began with organising meetings with the ward manager and modern matron. Both had appeared keen, but it was difficult to find a time everyone was free due to service pressures, Katharine working part-time, and time constraints due to attending placement and teaching. This was further complicated after SW was told they were to move to another building and the modern matron went on unexpected long-term leave, resulting in staff stress and low morale. In between many unanswered emails, I grew concerned about project feasibility. It was a lesson about possible challenges of conducting research in services when not based in them and importance of remaining aware of socio-political dynamics, including service pressures and changes. Despite months of delay,

both the ward manager and modern matron were still enthusiastic once things had settled and they could meet.

Ethical Approval. University ethical approval was fortunately granted relatively quickly, giving me hope to make up lost time. Unfortunately, Trust approval proved more complex. I emailed R&D, who signposted me to the clinical audit manager. After lengthy forms and phone discussions, the manager concluded the project should be classed a service evaluation rather than clinical audit. He signposted me to the evaluation department, who requested completion of another form. After some weeks, the application was denied. After reaching someone by phone, it became apparent the word "research" was problematic; I was granted Trust approval after removing all reference to this. It taught me about the possible impact of seemingly small factors like differences in language use and research conceptualisation. In the future, I will remember to clarify these earlier and attempt to create shared language.

During the last ethical approval stages the modern matron and ward manager unexpectedly left. I was told the project was handed over to the acting ward manager. I felt increasingly pressured to commence recruitment after various unanswered emails to introduce myself. I had a difficult conversation after reaching her by phone: it appeared she had not been informed and did not want to support the project. I felt disappointed. Fortunately, through helpful mediation from Katharine, she agreed to meet and support recruitment to two of the planned four focus groups (current inpatients and staff, not carers or discharged inpatients) but requested the staff group be shortened to 45 minutes. Based on Steering Group feedback, I considered recruiting the other groups through local organisations, but had run out of time for the ethical approval process and liaison this would require. This setback demonstrated the effect service-related changes and decisions can have on planned methodology. I will remember I may need to be flexible in my approach in the future and allow time for contingency plans and relationship-building.

Recruitment. Inpatient turnover and unpredictable staff shifts meant recruitment and data collection had to happen within days from each other. To give some advance notification, posters were displayed and emails circulated amongst staff. I attended a "mutual help meeting" and staff handover to be personally introduced and further distribute information. Recruitment reiterated the pressured atmosphere that can exist on wards and specific challenges this poses for research: many inpatients were unwell and unapproachable due to remaining in their rooms, lacking capacity, or refusing to speak. Staff were still feeling pressured and reluctant to participate. The process became further complicated due to Katharine being increasingly absent for personal reasons, meaning I did most of the work around recruitment independently. This was tricky considering Katharine was my main connection to SW, but I did learn much about myself and recruitment strategies through this process.

Fortunately, both inpatient and staff focus groups proceeded despite lower attendance to the former than hoped.

Data collection and analysis. The SIP provided my first focus group moderation experiences. Finding a balance between encouraging the open exploration key to qualitative research whilst keeping participants on track was sometimes challenging. Both groups diverted: inpatients by appearing to lose their trains of thoughts or becoming upset, and staff due to palpable tensions between professions. It epitomised the scientist-practitioner link as I found I turned to my clinical skills to manage. The groups fortunately provided some reassurance the SIP was still worthwhile: both commented on how valuable they found the space to reflect on SW's activities and asked whether further focus groups would take place. Data analysis was enjoyable but complex as it took time to ensure I was conducting thematic analysis properly and triangulate findings with Kristy Chow (Research Apprentice), who also transcribed recordings.

Unfortunately, I discovered it is equally easy for individuals to disengage again: when I returned to the service some months later following data analysis, it was just as difficult to organise feedback meetings, especially as Katharine had gone on long-term leave. Fortunately, the lead OT, when I managed to arrange a meeting, was very receptive and provided positive feedback. He was enthusiastic about organising several SU feedback meetings over the summer and has already implemented some changes. The acting ward manager has agreed to using a summer handover for staff feedback. These are thus far not the grand outcomes I had hoped for, but achievements considering unexpected difficulties. I also still plan to publish. I was grateful for Chris Gillmore's feedback on my report, after generously offering to step in for Katharine. For future projects I will ensure I have established "back-up" links within the service from the beginning.

PPE consultation. The SIP was the project with the most PPE (People with Personal Experience) involvement. A PPE read the draft proposal and provided input on materials before ethical approval. I founded a Steering Group to maintain awareness of direct experience perspectives and ensure the project met inpatient, staff, and service needs and interests. Katharine helped recruit two staff for this purpose, whilst carer and PPE involvement was facilitated through Lee Rawlings (AWP's Service User Involvement Coordinator). The group took much time to organise, demonstrating why many researchers may decide not to do this. It was time well spent: they were invaluable in providing feedback on materials, recruitment, and findings and recommendations.

Main Research Project

Idea Development. Initially interested in pursuing a project around formulation, I decided this was not practicable for the MRP after several discussions with staff. I am happy I explored this topic through my CLR, whilst developing the idea regarding the relationship between social anxiety (SA) and paranoia for my MRP. I first wondered about their association whilst working as support worker

with individuals experiencing both in the context of psychosis. Lorna Hogg's description at the research conference about this area brought this back to mind and led me to realise a current client with SA also appeared to experience more "paranoid-" than "SA-typical" thinking. Following some reading, I became enthusiastic about an opportunity to contribute to theory.

Proposal development was smooth after useful meetings with Lorna and later Megan Wilkinson-Tough, who helpfully agreed to co-supervise. I had some ambitious initial ideas and was encouraged by the proposal marker to scale this down. It took time and discussion to decide what to exclude and taught me I need to pay attention to idea feasibility in future research. Although it was disappointing to let some components go, I was grateful to be warned it read more like a PhD than DClin proposal, and resubmitted a more feasible project.

Project development was sometimes frustratingly slow. It was difficult finding an external supervisor; I liaised with seven separate individuals over several months and was pleased Louise Horner-Baggs took on the role. Meanwhile, I exchanged emails with helpful individuals who had conducted relevant research to develop the design, including Daniel Freeman, Helen Lockett, David Heavens, and Gemma Bullock.

Ethical Approval. During initial stages, each supervisor's unique input was useful by encouraging critical thinking about the design from multiple perspectives. This led to much time spent on material redevelopment; producing and reviewing several drafts of the Integrated Research Application System (IRAS) form; and piloting anxiety-task alternatives with PPE (which is why it was extra frustrating to find the anxiety-task manipulation failed!). Although overall this led to more rigorous design, I found it increasingly challenging over time to address the various concerns, particularly when these contradicted each other. I was becoming concerned by how long the fine-tuning was taking – especially considering the time necessary for NHS ethical approval and recruiting individuals experiencing SA and paranoia. It reminded me how long the development phase can take and the importance of starting this quickly.

My concern was not alleviated by changes to the ethical approval process around this time; the old system became obsolete a few months after starting. The changes meant little up-to-date guidance existed and I was grateful for mutual support from trainees undergoing the same process. There also appeared confusion within the university: the final documents and various university forms were bounced back and forth between the pro-vc, admin team, and myself. It was frustrating admin had to mediate; this increased pressure on them whilst undergoing a period of limited capacity, but also delayed the process by weeks at a time.

My eventual Research Ethics Committee (REC) experience was pleasantly surprising considering horror stories I had heard. Although being questioned by 20 individuals is naturally stressful, committee members were fair in their approach. I did not agree with all their decisions, however. For

example, they refused to approve seeing participants at home. Whilst providing new multidisciplinary perspectives on the project, it also demonstrated the bias involved in these decisions; a fellow trainee conducting a similar project *was* granted approval by another committee. I later spent much time going through the substantial amendment request process for this. Despite the committee agreeing with me, I was frustratingly unable to use it for recruitment due to the time this took.

The REC meeting happened before Christmas, meaning delay in REC approval and progression to the Health Research Authority (HRA). HRA processes also proved problematic, it was experiencing backlog due to the new system. Chasing people made all the difference, teaching me the importance of tenacity and assertiveness when navigating these systems. HRA requested further amendments and shifted onus onto the university to judge whether these counted as substantial or non-substantial, producing further waits. Paul Salkovskis helpfully discussed this issue with my HRA assessor, although they stuck with their opinion. After various documents were again bounced between various individuals, I received HRA approval which was sent to the university ethics committee and Trust R&Ds. After some final chasing, I received R&D approval and Letters of Access.

Recruitment. Whilst chasing NHS approval, I obtained university approval for collecting healthy control data and began liaising with NHS services and third-sector organisations to already develop contacts. I teamed up with trainees recruiting from the psychosis population (Megan Cowles and Taruna Jamalamadaka) to cast our nets as wide as possible. The process taught me how time-consuming it is to build these initial contacts, and I was grateful we were invited to seven multidisciplinary team and regional psychology meetings in services throughout Avon and Wiltshire and 2gether NHS Foundation Trusts, even though in hindsight this was not the most effective nor efficient strategy. Other sources I contacted included: Mind; Sane; Samaritans; University of Bath's Student Minds Team, Psychology Departmental and noticeboard webpages, and Counselling Service; AWP's Everyone Included; 2gether's "Let's Talk"; Social Anxiety UK; CallforParticipants.com; social media; and Rethink. After full ethical approval, I recruited a Research Apprentice (Jehanita Jesuthasan) to increase efficiency. Although this required much investment (advertisement, interviewing applicants, and training the apprentice in data input and healthy control recruitment and data collection), it proved very valuable. Jehanita's involvement was not just useful regarding project support, but gave opportunity to practice supervisory skills within a research context.

Data collection and analysis. I only received full approval by end February 2017, leaving only a few months to recruit clinical participants. Recruitment proved tricky, corresponding with difficulties reported by previous studies of SA and paranoia in recruiting adequately-powered samples (Lockett, 2011; Michail & Birchwood, 2009). Despite recruiting less than aimed, I was pleasantly surprised to receive 75 referrals and proud to have seen 47 participants within this short time-period – especially considering each participant required an average of four hours of investment considering

screening and follow-up calls and emails, travel across Gloucestershire and Bristol, 1-1.5-hour experiment, and liaison with their relevant clinicians.

The study was initially designed as mixed method (another new experience for me), involving the experimental task alongside semi-structured interviews regarding imagery. Despite being tiring and it sometimes feeling difficult to conduct an anxiety-provoking task with individuals, I enjoyed meeting participants face-to-face and developing skills in conducting experiments and research interviews. Although interviews were transcribed, it was decided to focus on the quantitative aspect due to time and word limit constraints. I was disappointed by the anxiety-task's ineffectiveness and lack of significant results regarding main analysis. The disappointment perhaps reflects how I have been pulled into the publication bias narrative. Although results have made it difficult to suggest clinical implications, the project has given insight into use of the Bentall paradigm with individuals within this population and has made several research recommendations. With this more balanced perspective in mind, I am looking forward to preparing a brief report for submission and feeding results back to those who volunteered their time to participate and recruit for the study. Despite recruitment and ethical approval frustrations, I am pleased to gain experience of this process whilst having cohort and supervisor support. I am keen to continue conducting research once qualified, including through the NHS, which I am now much better prepared for.

PPE Consultation. Original Steering Group plans did not materialise due to increasing time pressures and knowing how time-consuming this was for the SIP. However, a PPE of complex mental health difficulties read and provided input on the proposal, including design and materials. Three PPE (one from each comparison group) completed pilot run-throughs, including alternatives for the anxiety-task. I was pleased with my information booklet and poster after incorporating PPE feedback, which have since been used as templates for materials in Lorna's research and trainees in the year below.

Critical Literature Review

Idea development. The original CLR created my first setback: I discovered an unpublished thesis after proposal submission and could not create a workable alternative angle despite weeks of scoping. Although unfortunate, it meant the formulation topic abandoned for my MRP was used instead. I became interested this after being struck by the disparity between the lack of research (especially patients' voices) on the one hand, but our profession's emphasis on evidence-based and SU-informed practice on the other. Following initial literature searches and helpful reflections with my supervisors Lorna Hogg and Emma Griffith, I decided to focus on the efficacy and experience of formulation, fitting my interest in SU-involvement and experience.

Data collection and analysis. Initial searches produced too many papers to review due to false positives. Helpful meetings with Justin Hodds, Psychology librarian, refined the search strategy. It took many time-consuming tries to find the right approach. The first few full-text screenings found only

handfuls of papers, which could not be meaningfully reviewed. In hindsight, I was perhaps too focused on quantitative literature due to being previously involved in (and more comfortable with) quantitative systematic reviews. It gradually became clear worthwhile qualitative research had been conducted. I was unfamiliar with qualitative synthesis; despite knowing this would thus take longer, I was enthusiastic to learn another methodology.

Reflections. The CLR was more straightforward due to not needing ethical approval nor much liaison. When immersed, I enjoyed it due to my interest in the topic and sense of control. However, I learned I needed clearly fenced-off time to immerse myself and be productive. I often prioritised more immediately-pressing tasks of other projects due to needing to meet organisational deadlines and stakeholder expectations. I have learned I will need to block periods of time when conducting future reviews, especially within the busy NHS context involving much temptation to be pulled into "firefighting".

PPE Consultation. The CLR is the only project without PPE consultation. However, the SU-involvement thread runs throughout due to its exploration of both patient and staff views.

Case Studies

I valued the opportunity to conduct single-case experimental designs. My previous job involved training clinicians on the benefits and use of routine outcome measures (ROMs), so I was keen to put this into practice with my clients and establish a useful habit of preparing for possible write-up. Although not without challenges, case study criteria developed my ability to link theory to practice and provided an insightful way of planning, reviewing, and demonstrating my work that feels feasible even within busy NHS services. I am looking forward to presenting a SCED at the BABCP conference.

Overall Reflections

Although the perfectionist in me will always wish for more time, I am pleased to have produced the diverse papers contained in this and my *Case Study* portfolio. A main reason I applied to Bath was its emphasis on helping prepare publishable research. I have not published for some time, and I am keen to use the summer to work towards publication of all my research and case studies.

It was sometimes difficult to manage all three projects and five case studies alongside the consultancy and general placement work whilst trying to maintain some work-life balance. Although those who know me can attest I am still developing the latter, I know practicing this through juggling these components has helped prepare me for post-qualified life.

The work confirms how integral research is to my identity as psychologist and given me confidence to put this into practice despite barriers I will inevitably face. I am keen to develop experience in applying for funding and obtaining research grants and link this with my passion for SU-

involvement. I feel blessed for opportunities to pursue my interests and develop research skills through such diversity of experiences.

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Acknowledgements

I am incredibly grateful to everyone who has been involved in and helped shape my professional and personal development along this amazing three-year journey – I would not be who I am today without your input into my various experiences of this course along the way.

Main Research Project

I would like to thank all participants for your time and effort to take part in this study – without you this study would not have been possible. My sincerest thanks also to the clinicians who helped recruit despite your already busy work days, particularly Louise Horner-Baggs, Cara Davis, Andy Newman, and Sarah Elliott for spreading the word in your respective Trusts and services, and my fellow trainees for spreading the word online. I want to thank the three People with Personal Experience (PPE) who provided input into the study design and materials, which no doubt made participation in the study a much better experience. My gratitude also goes to Jehanita Jesuthasan, who spent many unpaid hours supporting recruitment and data collection and input in between exams and coursework. I am also grateful to my three supervisors, Megan Wilkinson-Tough, Lorna Hogg, and Louise Horner-Baggs for all your time, effort, and guidance throughout this project and the many occassions you provided me with renewed faith during times of doubt. Last but not least, I want to thank Carl Phillips (Wales REC 2 manager) for reviewing my IRAS draft prior to the REC meeting, Paul Salkovskis for helping negotiate HRA, Chris Hallsworth (MASH Statistics Advisory Service Coordinator) patiently guiding my statistical analysis, and fellow trainees and friends Megan Cowles and Taruna Jamalamadaka for joining recruitment forces.

Service Improvement Project

I want to thank each service user and staff member who agreed to participate despite the very busy and challenging nature of the ward. I also want to thank the PPE who provided initial input into study materials and each Steering Group member for agreeing to be part of this project; you all provided very invaluable advice regarding project development, recruitment, and dissemination of findings. My thanks also to the ward staff who facilitated this project, particularly Richie Smith and Patrick Cox for spending time introducing me to service users. I would also like to thank Jennie Boland for inspiring the idea for this project, Kristy Chow for volunteering many hours transcribing and co-analysing the focus group interviews, and Chris Gillmore for generously stepping in to review the final draft of the report and provide advice regarding dissemination. However, I would most like to thank Katharine Christie and Cathy Randle-Phillips for your continued guidance, support, and unwavering encouragement. Your warm, genuine, and supportive approach to supervision was much appreciated, especially during the trickier phases of the project.

Critical Literature Review

My deepest thanks to both of my supervisors, Lorna Hogg and Emma Griffith, for patiently helping me find a way to follow my research interest in formulation and providing helpful advice throughout my journey towards this synthesis, especially during the pressured times at the end. I would also like to thank Justin Hodds for providing much input into development of the search strategy.

Case Studies and Clinical Placements

I am eternally grateful to all the service users and staff whom I had the privilege to work with throughout my six clinical placements, especially for your consent for our sessions to be recorded so I could better develop my skills as therapist and consent for writing up our work for my case studies. I am also thankful to all the colleagues I have been blessed to work with, who helped shape my practice in various ways. I especially want to thank all my placement supervisors for helping me develop into the clinician I am today and your helpful input on my case studies. Jennie Boland, Hanna van der Woude, and Paul Whitby during the fledgling period of my clinical journey and Kate Allez for always looking out for learning opportunities and your support after my badly timed car accident at end of placement. I am very grateful to Eddy Draper, who helped boost my confidence, inspired my interest in working in CAMHS, and whose kind and gentle approach I particularly appreciated. I am also very thankful to Gemma Cody for being so sincere and personable, and being such a great role model in

defending psychology's corner and values. Last but not least I would like to thank my current supervisor Kelly Archer for helping me get to grips with ACT and your incredible patience and encouragement during these past stressful months.

Consultancy Project

I want to thank Kate Allez for helping me make the initial links with IHOT and providing helpful feedback on my consultancy proposal, Marc Pratt for commissioning the project, Claire James and Lisa Clark for providing the data and the documents showing IHOT's response to recommendations, and Cathy Randle-Phillips for your guidance throughout the process and feedback on my report. I want to thank all IHOT staff for your response to the project; it was really encouraging to hear the project was so valued.

General Process

I want to thank all staff on the course for working so hard to make each component – research, academic, professional, and clinical – so valuable and rewarding. I particularly want to thank Maria Loades, whom I feel really lucky to have had as clinical tutor. I have really appreciated your warm and containing approach and all of your patience, advice, and support throughout the course. I am especially grateful for your extra encouragement and problem-solving during the stressful periods and reminders to strive for that work-life balance, which I very much needed!

I also feel incredibly blessed to be part of the 2014 cohort, without whom I would not have gotten through this course. Emily, Roz, Julia, Hannah S, Taruna, Megan, Priya, Rosie, Dawn, Char, Kristina, Rachel, Carly, Sam, Lucy, and Hannah R – thank you for all the laughs and tears (poor Roger!) that you have shared with me. I will miss seeing you all every week and adding to our Christmas attire every year (although am still hopeful we will be establishing that commune) and I feel grateful to have so many new friends in my life. Thanks especially to my Claverton lunch buds: to my weekend wife Julia, I've enjoyed being able to nerd out with you (Spock hand emoticon here) and I look forward to many guilt-free cinema trips and Narya time with you; to my running, yoga, and travelling(!) partner, Roz, I can't wait for our trip, your guided tour of Cardiff, and our many half-marathons in the future (I've written it down now so can't back out!!); and to my fellow loyal Bathian, Emily, thanks for always being there for emotional and practical support, I hope we will continue our coffee times despite hopefully no longer being so desperate for caffeine. Thank you also to all my other friends for always being there for me, with special thanks to Faria and Ayaka – even though we live too far away for my liking and I don't get to see you nearly as much as I'd like, it never feels like we've been apart.

To my family: my amazing mom Maria, awesome sister Naomi, and dad Lucien, zonder jullie zou ik dit echt nooit hebben kunnen doen. Thank you for all the long-distance Facetime support over the years, during and before the Doctorate, and especially Naomi for reading through drafts of some of my reports. Ik hoop dat ik jullie en Arwen nu veel vaker kan gaan zien (ook al verhuis je nu naar Burkina Faso, Nai)! Ik hou van jullie. Finally and most importantly, my sincerest and deep-felt gratitude to Craig for sticking with me through the ups and downs these past three years (and the seven years before that!). Words honestly cannot describe how much you mean to me. You have been so patient during all the times I've had to work despite already seeing each other so little, and your constant encouragement is what kept me going. Living so far away from you these past few years has been really tough, but thank you for supporting what I needed to do. I love you and I look forward to sharing a home with you again.

Appendices

Appendix A (CLR): Author Guidelines (*Social Science and Medicine*)

Social Science & Medicine provides an international and interdisciplinary forum for the dissemination of social science research on health. We publish original research articles (both empirical and theoretical), reviews, position papers and commentaries on health issues, to inform current research, policy and practice in all areas of common interest to social scientists, health practitioners, and policy makers. The journal publishes material relevant to any aspect of health and healthcare from a wide range of social science disciplines (anthropology, economics, epidemiology, geography, policy, psychology, and sociology), and material relevant to the social sciences from any of the professions concerned with physical and mental health, health care, clinical practice, and health policy and the organization of healthcare. We encourage material which is of general interest to an international readership.

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Cancer Research UK, 1975. Cancer statistics reports for the UK.
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Appendix B (CLR): Study Characteristics

Data extraction: details of included studies (white = SU participants only; blue* = staff participants only; green** = both SU and staff participants)

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
1	**(Cairns, Reid et al., 2015)** *Title*: Experience of psychosocial formulation within a biopsychosocial model of care for first-episode psychosis. *Aim*: To explore the experience of people engaging with a process of psychosocial formulation whilst also being supported by clinicians representing a biological understanding of psychosis	*Data collection*: Semi-structured individual interviews (22-55 min) *Timing*: ? *Analysis*: IPA (Smith & Osborn, 2008)	*N*: 9 SUs *Age*: 19-36 *Sex*: All men *Ethnicity*: Majority White; one mixed White/Black African *Diagnoses:* Psychosis *Sampling*: Purposive	*Country:* England (North of) *Setting(s):* 5 EI services	*Inclusion:* • Under care of EI team • Within 3 years of onset of 1st treated episode of psychosis (assessed using PANSS; Kay et al., 1987), during which engaged in longitudinal psychosocial formulation with psychologist/psychotherapist • Age > 18 *Exclusion:* • Primary cause of psychotic symptoms is substance misuse, head injury, organic disorder • Met 'at risk' criteria (CAARMS; Yung et al., 2005) • Not met PANSS criteria • No capacity to consent • Unable to converse in English	*Framework:* Longitudinal psychosocial formulation *Method:* ? *Staff details[b]:* Two SUs seen by CP; others by CBT therapist	• Generalisability due to qualitative nature • Application of biopsychosocial model of care may vary	18.5 HQ
2**	**(Chadwick, Williams et al., 2003)** *Title:* Impact of case formulation in cognitive behaviour therapy for psychosis. *Aim*: To gather subjective information about experiences of formulation	*Data collection:* Semi-structured individual interviews *Timing:* "Shortly after formulation" *Analysis:* Mixed method ?qualitative analytic approach	*N:* 13 SUs; ? at least 2 staff *Age*: 31.5 (mean) *Sex*: 6 women, 7 men *Ethnicity*: ? *Diagnoses:* Psychosis (incl. paranoid schizophrenia, schizo-affective and delusion disorder) *Sampling:* Purposive?[a]	*Country:* UK? *Setting(s):* ?	*Inclusion:* • SUs: drug-resistant distressing positive symptoms of at least 6 months *Exclusion:* ?	*Framework:* CBT *Method:* 1:1 verbal (2 sessions), developmental diagram, written letter *Staff details:* 2 accredited CBT therapists with 6 and 15 years experience of psychosis work and their specialist CP trainees	• Formulation not presented in one go (introduced gradually over number of sessions) - but might be more externally valid • Formulation might have impacted differently over a longer time scale	4.5 LQ
3*	**(Christofides, Johnstone et al., 2012)** *Title:* 'Chipping in': Clinical psychologists' descriptions of	*Data collection:* Semi-structured individual interviews *Timing:* ?	*N:* 10 CPs *Age*: ? *Sex*: 6 women, 4 men	*Country:* UK *Setting(s):* Inpatient and	*Inclusion:* Identified as currently using formulation with members of a multidisciplinary team	*Framework:* Variety (CBT, schema, systemic, social, recovery model, narrative,	• Participants self-selected - likely to have been advocates of formulation	18.5 HQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
	their use of formulation in multidisciplinary team working *Aim*: To investigate the use of psychological formulation in multidisciplinary team working as reported by clinical psychologists based in inpatient or community adult mental health services	*Analysis:* Thematic Analysis (Braun & Clark, 2006)	*Ethnicity*: ? *Sampling:* Opportunity? (all 78 CPs in one NHS Trust working in adult mental health services sent an email invitation)	community adult mental health services	*Exclusion:* ?	attachment, psychodynamic) *Method:* Team verbal, written *Staff details:* • Qualified: 1-11 years; mean 5 years • Employment in team: 1-10 years; mean 3 years	• No input MDT or SUs in design/analysis • Generalisability (all worked in adult services)	
4*	**(Craven-Staines, Dexter-Smith et al., 2010a)** *Title:* Integrating psychological formulations into older people's services – three years on (Part 3): Staff perceptions of formulation meetings *Aim*: To explore staff perceptions of the formulation meetings held within their own locality in terms of the process, impact, and theoretical understanding	*Data collection:* Semi-structured individual interviews (10-20 min) *Timing:* ? *Analysis:* ?	*N:* 20 various staff (e.g. staff nurses, OTs, social workers, support workers and HCAs) *Age*: ? *Sex*: ? *Ethnicity*: ? *Sampling:* Opportunity	*Country:* England (Tees, Esk and Wear Valleys NHS Foundation Trust) *Setting(s):* Mental health MDTs working with older adults	*Inclusion:* ? *Exclusion:* ?	*Framework:* CBT, 5P *Method:* Team verbal, diagrammatic, written Meeting details: • Locality 1: weekly 1.5 hours, completing either 2 new formulations or 4 formulation reviews • Locality 2: twice weekly 1.5 hours, 1 hour to a new formulation and 30 min to a review • Written into care plan *Staff details:* • Locality 1: led by CPs initially; then others within MDT • Locality 2: led by CPs	None mentioned	13 LQ
5	**(Evans & Parry, 1996)** *Title:* The impact of reformulation in cognitive-	*Data collection:* Semi-structured individual interviews	*N:* 4 SUs *Age*: 24-42	*Country:* UK? *Setting(s):* ?	*Inclusion:* • Assessed as suitable for CAT • "Difficult to help": 2+ episodes of contact with MH professional	*Framework:* CAT *Method:*	Incongruence qualitative and quantitative data (which demonstrated no significant changes) -	9.5 LQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
	analytic therapy with difficult-to-help clients *Aim:* To evaluate the view of patients on the short-term impact of reformulation on their therapy, including what they had found helpful	*Timing:* 3-4 sessions after reformulation session *Analysis:* Mixed method ?qualitative analytic approach	*Sex*: All women *Ethnicity*: ? *Diagnoses:* Complex *Sampling:* Purposive?		without significant change & one of following: o 2+ previous inpatient admission o History overdoses/other self-injury o Meeting DSM-III-R criteria for MDD, OCD, or BPD o Stated reluctance to engage in psychotherapy *Exclusion:* ?	Verbal, written letter (usually presented in 4th session) *Staff details:* Female CP, 13 years post-qualification experience and training in psychodynamic therapy, CBT, CAT	might be subjects were trying to 'say the right thing' during interviews and felt able to be more 'honest' on questionnaires. However this is unlikely considering they all knew it was anonymous	
6**	**(Halpin, Kugathasan et al., 2016a)** *Title:* Case formulation in young people with post-traumatic stress disorder and first-episode psychosis. *Aims:* • Explore experience of CF by examining the client and therapist experiences of CF in a CBT-based case-management intervention for symptoms of PTSD and psychosis in those with a FEP • Inform development of effective treatments for those with trauma histories and FEP	*Data collection:* Semi-structured individual interviews (1 hour) *Timing:* 1-6 months post-CF *Analysis:* IPA (Smith et al., 2009)	*N:* 3 SUs; 2 CPs *Age*: 19-20 (SUs) *Sex*: All women (SUs) *Ethnicity*: ? *Diagnoses:* emerging psychotic disorders *Sampling:* Purposive? (recruited from a pilot trial of newly-developed intervention)	*Country:* Australia (Melbourne) *Setting(s):* Early Psychosis Prevention and Intervention Centre (EPPIC): intensive outpatient treatment	*Inclusion (SUs):* • DSM-IV diagnosis of psychotic disorder or mood disorder with psychotic features • Age 15-25 • CAPS-IV diagnosis of PTSD *Exclusion (SUs):* • IQ < 70 • Inability to speak English	*Framework:* CBT, 5P *Method:* 1:1 verbal (guideline 1-2 sessions), written CF letter *Staff details:* See Sample	• Small sample size (limits generalisability) • CF not heavily structured & did not occur within defined number of sessions (1-2 sessions was guideline) • 2 SU interviews took place months after CF (hard to disentangle from other parts of treatment) • All-female sample • 1 therapist interviewed twice • Difference in experience level of 2 therapists	16 HQ
7	**(Hamill, Ried et al., 2008)** *Title:* Letters in cognitive analytic therapy: The patient's experience *Aims:* To develop a deeper understanding of how letters impact on CAT therapy from the perspective of the patient	*Data collection:* Semi-structured individual interviews (1 hour) *Timing:* Between final and follow-up therapy session *Analysis:* IPA	*N:* 8 SUs *Age*: 20-85 *Sex*: 5 women, 3 men *Ethnicity*: White (all) *Diagnoses:* Depression (2 had comorbid anxiety)	*Country:* UK *Setting(s):* ?	*Inclusion:* • English-speaking adults *Exclusion:* ?	*Framework:* CAT *Method:* 1:1 verbal, written, diagrammatic (over 2 sessions) Naturalistic timing of formulation: mean sessions before	Only 8 White patients - but richness was captured, especially due to 2 interviews and including difficult experiences of therapy	20 HQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
			Sampling: Opportunity? (Recruited through therapists, asked not to select according to criteria)			formulation was 10, range 5-18 *Staff details:* 5 female UK-trained CPs who had completed further CAT training and had 2-10 years CAT experience		
8*	**(Hollingsworth & Johnstone, 2014)** *Title:* Team formulation: What are the staff views? *Aim:* To evaluate staff perceptions of team formulation, specifically with reference to the proposed benefits highlighted by previous research	*Data collection:* Small-scale retrospective survey with open-ended questions *Timing:* ? *Analysis:* Mixed method ?qualitative analytic approach	*N:* 22 various staff (social workers, psychiatrists, OTs, community psychiatric nurses, inpatient ward staff, nurse therapists, support workers) *Age*: ? *Sex*: ? *Ethnicity*: ? *Sampling:* Opportunity? (All 31 staff members who had participated in 1+ team formulation meetings were invited)	*Country:* Wales *Setting(s):* ?	*Inclusion:* • Participation in 1+ team formulation meetings *Exclusion:* ?	*Framework:* Integrative (drawing from CBT, psychodynamic, systemic, CAT) *Method:* Team verbal, written *Staff details:* 3 CPs	• Unable to determine whether differences between responders and non-responders - may have introduced bias • Self-representation bias (although questionnaires were anonymised to combat this) • Non-specific factors may have accounted for benefits (e.g. consultation space, increased team contact) - but there was an association between formulation agreement and perceived helpfulness	10 LQ
9	**(Kahlon, Neal et al., 2014)** *Title:* Experiences of cognitive behavioural therapy formulation in clients with depression *Aim:* To explore experiences of CBT formulation among clients with depression	*Data collection:* Semi-structured individual interviews *Timing:* ? *Analysis:* Thematic Analysis	*N:* 7 SUs *Age*: 19-64 *Sex*: 4 women, 3 men *Ethnicity*: 5 White-British, 1 Asian-British, 1 Asian-Other *Diagnoses:* Depression	*Country:* UK? *Setting(s):* Primary and secondary psychological services for adults using a CBT approach	*Inclusion:* • Adults of working age (18-65) • Referred to psychological services for depression • Not previously received a formulation *Exclusion (SUs):* • Comorbid severe and enduring psychological difficulties • Lack capacity to consent • Received psychological therapy prior to CBT	*Framework:* CBT *Method:* ? (1:1) *Staff details:* ?	• Clinicians did not use pure CBT perspective - unclear whether findings would have been the same if so • Nature and power of therapeutic relationship not considered (e.g. interpersonal style of participants) • Length of depressive episode varied; did not	17 HQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
			Sampling: Purposive				establish whether duration or chronicity impacts upon experience • Clients may have experienced different levels of formulation • Purposive sampling means participants may have been those who responded well or perceived as having good alliance - could have led to sampling bias and over-reporting of positive reactions	
10	**(Leeming, Boyle et al., 2009)** *Title:* Accounting for psychological problems: How user-friendly is formulation? *Aim:* To present data about the experience of receiving psychosocial formulation, which came out of a larger qualitative research study on managing shame	*Data collection:* Semi-structured individual interviews *Timing:* ? *Analysis:* Thematic Analysis	*N:* 22 SUs *Age*: 15-89 *Sex*: ? *Ethnicity*: ? *Diagnoses:* ? *Sampling:* ?	*Country:* UK? *Setting(s):* CAMHS, 2 OA CMHTs, user group regarding stigma	*Inclusion:* ? *Exclusion:* ?	*Framework:* Psychosocial formulation *Method:* ? (1:1) *Staff details:* ?	• Part of a larger study	8 LQ
11*	**(Mohtashemi, Stevens et al., 2016a)** *Title:* Psychiatrists' understanding and use of psychological formulation: A qualitative exploration *Aim:* To establish an initial conceptualisation of how psychiatrists understand and use formulation within adult psychiatry practice	*Data collection:* Semi-structured individual interviews *Timing:* ? *Analysis:* Grounded-theory based (constructivist; inductive) Three questions: 1 How do psychiatrists understand formulation? 2 How do psychiatrists use formulation in their everyday	*N:* 12 psychiatrists *Age*: 33-67 *Sex*: ? *Ethnicity*: Diverse *Sampling:* Opportunity; theoretical sufficiency (when conceptual categories did not require revision)	*Country:* UK *Setting(s):* Adult services across 4 NHS trusts	*Inclusion:* ? *Exclusion:* ?	*Framework:* ? *Method:* ? (1:1 and team) *Staff details:* ?	• Researcher is psychologist (social desirability) • Sampling bias: those who volunteered may have felt more strongly about the research topic than profession generally	18 HQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
		practice? 3 Do psychiatrists value the process of formulation with CPs and/or in a team?						
12	**(Pain, Chadwick et al., 2008)** *Title:* Clients' experience of case formulation in cognitive behaviour therapy for psychosis *Aim:* To assess clients' experience of the CF process in cognitive behaviour therapy for psychosis	*Data collection:* Semi-structured individual interviews (10-45 min; mean 27 min) *Timing:* 2-3 weeks after CF *Analysis:* Mixed method Content Analysis (inductive and exclusive)	*N:* 13 SUs (qualitative); 2 CPs (quantitative) *Age*: 21-54 (SUs) *Sex*: 5 women, 8 men (SUs) *Ethnicity*: ? *Diagnoses:* Psychosis (incl. 5 paranoid schizophrenia, 5 schizophrenia, 1 schizo-affective disorder) *Sampling:* Purposive	*Country:* UK *Setting(s):* Cognitive therapy for psychosis service run through locality mental health teams (which included linked acute wards)	*Inclusion:* • Enduring (at least 6 months) and distressing psychotic experiences *Exclusion:* ?	*Framework:* CBT *Method:* 1:1 verbal, written, diagrammatic (Beckian developmental diagram) over 2 sessions Naturalistic timing of CF; mean sessions before CF was 10, range 5-18) *Staff details:* 2 CPs with 6 and 16 years experience of CBT for psychosis, and practitioners working under their weekly supervision (2 specialist trainee CPs; CBT Nurse Specialist). The 2 lead CPs had weekly peer supervision	• Generalisability limited due to small numbers, selection process, qualitative methodology	16 HQ
13*	**(Picken & Cogan, 2012)** *Title:* The experiences of clinicians using formulation in adult mental health: An interpretative phenomenological analysis. *Aim:* To explore clinicians' understandings and experiences of using formulation in an adult mental health service	*Data collection:* Focus group (1 hour) *Timing:* ? *Analysis:* IPA	*N:* 7 qualified therapists *Age*: ? *Sex*: ? *Ethnicity*: ? *Sampling:* Purposive	*Country:* UK *Setting(s):* Adult mental health psychology	*Inclusion:* ? *Exclusion:* ?	*Framework:* ? *Method:* ? (1:1) *Staff details:* ?	• Focus group methodology: responses are not independent	13 LQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
14	**(Redhead, Johnstone et al., 2015)** *Title:* Clients' experiences of formulation in cognitive behaviour therapy *Aim:* To explore clients' experiences of formulation in CBT for depression and/or anxiety disorders, as reported after the end of therapy	*Data collection:* Semi-structured individual interviews *Timing:* ? *Analysis:* Thematic Analysis Questions: • What are clients' emotional responses to formulation? • How do clients perceive the helpfulness or otherwise of formulation?	*N:* 10 SUs *Age*: 24-67 *Sex*: 8 women, 2 men *Ethnicity*: White-British (all) *Diagnoses:* Depression and/or anxiety *Sampling:* Purposive	*Country:* England *Setting(s):* IAPT services	*Inclusion:* • Met IAPT criteria for depression and/or anxiety disorder • Age > 18 years • Capacity to consent • Soon to complete course of CBT of > 8 weeks duration *Exclusion:* • Significant comorvidity (e.g. psychosis) • Significant suicide risk • Need for an interpreter	*Framework:* CBT *Method:* ? *Staff details:* High Intensity Workers (3 CPs, 2 counsellors, 1 counselling psychologist, 1 psychiatric nurse) 4-15 years CBT experience (mean=10.2 years)	• No measure to ensure therapist fidelity to defined formulation process of specified level of detail (but enhances ecological validity) • Impossible to conclude cause and effect - may have been further additional variables which accounted for participants' responses (e.g. unhelpful thinking styles)	18 HQ
15	**(Shine & Westacott, 2010)** *Title:* Reformulation in cognitive analytic therapy: Effects on the working alliance and the client's perspective on change *Aims:* • Qualitative: to explore the client's perspective of the reformulation process • Quantitative: to investigate whether the reformulation process in CAT has an impact upon a measure of working alliance	*Data collection:* Semi-structured interviews using the Client Change Interview (CCI) *Timing:* ? *Analysis:* Mixed method Template Analysis (Crabtree & Miller, 1992)	*N:* 5 SUs *Age*: 22-63 *Sex*: 4 women, 1 man *Ethnicity*: White-British (all) *Diagnoses?* *Sampling:* Purposive (Selected via 4 CAT therapists from local NHS Trusts)	*Country:* UK *Setting(s):* ?	*Inclusion:* • English-speaking adults *Exclusion (SUs):*	*Framework:* CAT *Method:* 1:1 verbal, written *Staff details:* 4 CAT therapists All White-British, age 37-59.	None described related to qualitative component	18.5 HQ
16*	**(Summers, 2006)** *Title:* Psychological formulations in psychiatric care: Staff views on their impact. *Aim:* To understand the benefits and limitations of	*Data collection:* Semi-structured individual interviews (max. 20 min) *Timing:* ? *Analysis:* Grounded-theory based	*N:* 25 various staff (9 nurses, 11 support workers, 2 doctors, OT, social worker, drama therapist) *Age*: ? *Sex*: ?	*Country:* UK? *Setting(s):* High-dependency rehabilitation service	*Inclusion:* ? *Exclusion:* ?	*Framework:* CBT / object relations *Method:* Team verbal, written, diagrammatic (2-weekly, 90-minute formulation meetings)	• Self-presentation bias, e.g. towards giving 'acceptable' views • Researcher factors, e.g. prior interest in formulation, may have influenced both interviews and analysis	14 LQ

No	Citation & Aim(s)	Methodology	Sample	Country, Setting(s)	Inclusion & Exclusion Criteria	Formulation	Limitations[c]	Quality Rating
	using psychological formulations for patients with severe mental illness		*Ethnicity*: ? *Sampling:* Purposive (Sample was selected with aim of achieving maximum variation)			*Staff details:* Formulations written by and meetings led by either CP or specialist registrar in psychoanalytic therapy	• Limited generalisability to other contexts	
17*	**(Wainwright & Bergin, 2010)** *Title:* Introducing psychological formulations in an acute older people's in-patient mental health ward: A service evaluation of staff views *Aim:* To assess staff views on the effectiveness of introducing formulation meetings onto an acute inpatient ward for older women with functional mental health problems	*Data collection:* Semi-structured individual interviews *Timing:* Prior to commencement and at the end of the pilot project that introduced team formulation onto ward *Analysis:* Content Analysis & Thematic Analysis	*N:* 5 various staff (2 registered nurses, a HSW, OT, staff grade doctor) *Age*: ? *Sex*: ? *Ethnicity*: ? *Sampling:* Opportunity (volunteered to take part)	*Country:* UK? *Setting(s):* Inpatient mental health ward for older women with functional problems	*Inclusion:* ? *Exclusion:* ?	*Framework:* CBT *Method:* Team verbal, diagrammatic (1-hour team formulation meetings) *Staff details:* Facilitated by CP or accredited CBT therapist and trainee CP	• Small sample size • Reduced researcher impartiality and possible impact on data interpretation due to trainee CP involvement in pilot study and this study (could have used triangulation) • Social desirability due to being conducted by service itself (although did change interviewer between rounds) • Cannot provide any indication of impact on SUs	10.5 LQ

Notes.
[a] "?" after statement = not explicitly stated in paper, guessed by main review author
[b] Details of staff who lead the formulation
[c] Limitations mentioned by paper

Other key abbreviations: SU=service user; EI=Early Intervention; CP=Clinical Psychologist; CBT=Cognitive-Behaviour Therapy; MDT=Multidisciplinary Team; CAT=Cognitive-Analytic Therapy; OT=Occupational Therapist; HCA=Health Care Assistant; NHS=National Health Service; MDD=Major Depressive Disorder; OCD=Obsessive Compulsive Disorder; BPD=Borderline Personality Disorder; FEP=First Episode Psychosis; CF=case formulation; CAMHS=Child and Adolescent Mental Health Service; CMHT=Community Mental Health Team, IAPT=Improving Access to Psychological Therapies; IPA=Interpretative Phenomenological Analysis; HSW=Housing Support Worker

10 questions to help you make sense of qualitative research

How to use this appraisal tool

Three broad issues need to be considered when appraising a qualitative study:

Are the results of the study valid? (Section A)
What are the results? (Section B)
Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions.

There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.:

Critical Appraisal Skills Programme (2017). CASP (insert name of checklist i.e. Qualitative Research) Checklist. [online] Available at: *URL*. Accessed: *Date Accessed*.

Screening Questions

1. Was there a clear statement of the aims of the research? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- What was the goal of the research?
- Why it was thought important?
- Its relevance

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2. Is a qualitative methodology appropriate? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
- Is qualitative research the right methodology for addressing the research goal?

Is it worth continuing?

Detailed questions

3. Was the research design appropriate to address the aims of the research? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the researcher has justified the research design (E.g. have they discussed how they decided which method to use)?

4. Was the recruitment strategy appropriate to the aims of the research? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
- If there are any discussions around recruitment (e.g. why some people chose not to take part)

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5. Was the data collected in a way that addressed the research issue? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the setting for data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
- If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)?
- If methods were modified during the study. If so, has the researcher explained how and why?
- If the form of data is clear (e.g. tape recordings, video material, notes etc)
- If the researcher has discussed saturation of data

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6. Has the relationship between researcher and participants been adequately considered? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during
  (a) Formulation of the research questions
  (b) Data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

7. Have ethical issues been taken into consideration? ❒ Yes ❒ Can't tell ❒ No

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

8. Was the data analysis sufficiently rigorous? ❒ Yes ❒ Can't tell ❒ No

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
- To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

9. Is there a clear statement of findings?

❑ Yes ❑ Can't tell ❑ No

HINT: Consider

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researchers arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original research question

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10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy?, or relevant research-based literature?
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

Appendix D (CLR): Second-Order Constructs

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			SERVICE USER (SU) VIEWS (N=10)		
1	**(Cairns et al., 2015)** 18.5 (HQ)	Shaping the experience	Aspects of formulation like education, tools, and techniques increase understanding and help manage distress. Formulation can develop tools but is also itself seen as a tool to go back to Helps clinicians be responsive to service users' needs, be flexible, and allow therapy to be shaped in the most meaningful manner	• "you learn from talking to people, getting a better understanding, like psychiatrists, like the way we behave and the way things affect us…the therapist has an understanding of certain, your behaviour… mainly I've just learnt to tell people when I'm feeling stressed" (p.55) • "now and again I go back to that [the formulation] and that helps" (p.56) • "it was hard to understand but once I understood it was easy to like, at first like, I was in a state over it then once I understood it I was like "oh this is nothing, just go with the flow like" (p.55)	• Revisiting formulation after therapy • Increasing understanding of self • [NB: comment re clinicians – inference from authors (not grounded in example)]
		Formulation makes a distinctive contribution	The experience of psychosocial formulation as making a distinctive contribution to the support 'package', often involving participants' first experiences of exploring their early life experiences and aiding their understanding. For some this was well incorporated in other areas of support and others kept this experience separate due to experiencing it as upsetting	• "once I knew what the problem was it made me understand why I was seeing things and why I was hearing things and why I was feeling like everybody was against me and hated me and, so it, it made me understand what I was going through and then having [care coordinator] and [psychiatrist] and [therapist] all going through it with me makes it easier for me to fit along with the medication as well as the sessions I was having with [therapist]" (p.54) • "I didn't really wanna go into it with anyone else" (p. 54)	• Increasing understanding of self – both of predisposing and perpetuating factors • Fitting in with other parts of care • Some emotional response (upsetting) • If (negative) emotional response, keep the formulation between just therapist and client?
		A joined-up 'package' of support	Formulation experienced as a different yet often complimentary component of coherent biopsychosocial model. Clinicians appeared key in enhancing sense of coherence, which aided understanding and sense of security. Struggling to understand formulation can impact ability to engage with whole team; whilst understanding it can aid communication skills	• "I could explain it in words and visions rather than getting confused and muddled up on what I was saying" (when discussing experience with psychiatrist; p.53)	• Using it as communication tool (but not everyone – see quote above) • Part of a bigger (biopsychosocial) picture
2*	**(Chadwick et al., 2003)**	Enhancing understanding of problems	For themselves but also that formulation showed their therapist understood them	-	• Increasing understanding of

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
	4.5 (LQ)				self and of therapist – demonstrating therapist listening (alliance?)
		Emotional response (positive, negative, ambivalence, none)	Feeling reassured, encouraged, and more optimistic versus saddening, upsetting, and worrying	• "I saw a way forward"; "I felt more optimistic about therapy" • "there are so many factors, I can't see how the patterns can be stopped"	• Emotional response (positive, negative, ambivalence, none)
		Complicated nature of	Would like to have an example formulation presented first; felt surprised	-	• Complexity – overwhelming?
5	**(Evans & Parry, 1996)**	Emotional impact	Reminds of painful memories – material had tried to blank off	"Overwhelming", "frightening"	• Largely negative emotional impact – formulation = challenging
	9.5 (LQ)	Better understanding	Of own problems, and therapist of SUs – vital to trust	• "…proof that she really did know what I felt like. The other doctors listened, but I thought, are they taking it all in, do they care…At first I felt the same with my therapist, but since I've had the reformulation I've had 100% trust"	• Therapeutic alliance / understanding of self and therapist
		Focus for therapy		• "…everything is out on the table – you know that you are not going to get distracted by less important things"	• Focus for therapy / intervention planning / goal-setting
6	**(Halpin et al., 2016)**	Developing insight	Making links between past and present; sometimes wanting to spend more time on present. Awareness of the triggers and maintaining factors of problems	• "I can see that's what's triggered me so I can calm down easier…In the past I wasn't able to do that and I would just get overwhelmed and stuck"	• Understanding self / developing insight (or lack thereof)
	16 (HQ)			• "It did help highlight where it all stemmed from but it doesn't feel like it's really helped much… It didn't feel relevant to what I'm going through now"	• Predisposing / perpetuating
		A challenging experience	Difficult nature of completing formulation due to *emotional impact* – feeling overwhelmed, dissociating, experiencing post-session exhaustion	• "Because I'm trying to put that in the past with XX beating me and stuff like that and when it [formulation] got up to XX I'm just like I can't"	• Emotional response (negative) / challenging
7	**(Hamill et al., 2008)**	Connecting to self: understanding and awareness of self over time	*Focusing on internal processes* that required gradual assimilation over time: (1) receiving another perspective; and (2) approaching uncomfortable experiences (provoking strong, often painful emotional responses).	• "You explore and you try and understand what's the matter with you and you…you admit to certain things, and then [the reformulation letter is] almost as if, I suppose, it's self-knowledge, I mean it's painful self-knowledge" (p.577)	• [NB: overarching theme of 'making connections' (to self, therapist, therapy, and others)
	20 (HQ)		*Providing a lasting document, facilitating ongoing assimilation and awareness of self.* Sensory aspects of letters often described. Contrasting view of not representing anything lasting, but as only one, current impression	• "…however well written a document is…it doesn't include the physical, the emotional, the…I mean it can suggest that, but it doesn't encapsulate that. It is a statement of how one person felt or felt that they needed to express themselves at a given time. It isn't necessarily how the person feels when they reread that document; and that to me doesn't destroy the	• Change over time • Emotional response • Tangibility • Revisiting • Distance from –

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			Offering a tangible reality and literal perspective or distance from problems, *providing continuity within therapy* and enabling rereading outside of therapy	value but it limits the value" (p.577) • "Visually looking at and thinking, because I hadn't looked at it in that way before… because it was on paper, and it was someone else's views on me and it was actually in front of me, in words on a piece of paper, so it was more ...it felt it was more real, it was more, 'This is actually what it is, and this is how someone else perceives me.'" (p.577)	cognitive diffusion?
		Connecting to therapist: patient's perception of therapeutic relationship	*Expressing therapists' respect, care, and commitment to the patient* – contributing to ongoing motivation. Some described changes in this over time (i.e. not feeling initially able to trust and letters stimulating feeling of being exposed and potential for therapist to hurt them) *Contributing to perceptions of therapist's skill and competence* *Developing awareness of the collaborative nature of therapeutic relationship*	• "The [reformulation letter] reassured me that ...she was getting what she wanted from me ...It just confirms that you're not, that each of us aren't wasting the other person's time, which is rather important ...It also helped me feel when I saw how she was assimilating things ...I then realized how much of what she had said to me I was assimilating ...We're meshing together really, isn't it?'" (p.578) • "I think if I remember rightly I was quite surprised how long the letter was and how deep and how much she'd remembered, even the small things that had been said...I think it's a feeling that she cares, that she bothered to do [the reformulation letter], and [she's] very good at her job" (p.578)	• Therapeutic alliance – shown therapist listening; collaborative • Change over time • Therapist skill
		Connecting to the therapy process: patients' perception of the structure of the therapy	*Framing the therapy from beginning to end* by providing a structure for understanding. Breaking difficulties into component parts helped make them feel more manageable and gave events new meaning. Helped reflect on goals and recognition of unhelpful procedures *Offering a means to reflect on therapy experience and formally marking the end (goodbye letters)* – raised different emotions (sadness, gratitude, anger)	• "So [the reformulation letter] sort of broke that down so I thought, ''Right. That's how I'll tackle it,'' different areas, so that was quite good like that ...And you know it made me want to get in there and get it sorted because it'd ...it did recognize what the problems were, it was on a bit of paper, you could break it down and sort it out ... You know it gave structure, it sort of moved you forward in the therapy" (p.578)	• Emotional responses (varied) • Focus/structure for therapy – goals • More manageable
		Connecting to others: using letters to communicate self with others	*Sharing formulation letters to communicate self to others in personal life.* However, allowed others to read formulations was perceived as risky: potential to come to harm, increase interpersonal problems (by contradicting others' views and leading to conflict), connecting others with painful events (letters as potential weapons) *Sharing formulation letters to communicate self to health professionals*	• "I didn't show [the reformulation letter] to my wife ...No, I wondered as I was reading it ... I thought, ''Well, perhaps shall I show it to my wife?'' and I thought, ''No, no'' ...Well, there was something in it ...and I know we've talked about that and my wife says ''It's not true and don't keep saying it,'' so I didn't want to stir up things at home really." (p.579)	• As communication tool (possibly dangerous one) – in personal life and with other professionals • Interpersonal danger
9	**(Kahlon et al., 2014)**	Developing the formulation	Formulation development requires collaboration and time for clients to feel understood, able to contribute,	• "I think, retrospectively, I realized it was more of a validation for me because it was coming from me and I was talking	• Takes time • Collaborative

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
	17 (HQ)		comfortable to address perceived inaccuracies, and share their feelings	through everything myself and coming to my own conclusions. And I think it had more of an impact, and my clinician would affirm what I was saying or nod and I think, because she obviously thought the same things"	
		Emotional reactions	• Receiving a formulation and sharing feelings with clinician can be difficult, especially at the start (mixed views) • From negative towards mixed feelings: revelation (regarding having missed out on aspects of life), empowerment (by being fully present), or relief (linked to understanding why experiencing feelings)	• "Oh it was very hard to look at it at the beginning and to think that I had been thinking this way for so long. I wanted to just close my eyes and ignore what was in front of me. Some aspects were completely new to me. But once I started to revisit the formulation I started to realise that not all of the information was new, in fact I already knew some of it. But along the way I had stopped seeing the whole view – like selective vision"	• Emotional response (varied; change over time)
		A new journey: towards making sense of oneself	• Rediscovering lost identities by having better strategies to manage negative thoughts and feelings and a normalized perspective • New perspectives and skills increasing confidence, self-acceptance, control, empowerment	• "I just seem to know myself much better now – I know, erm, why I feel the way I do and this has kind of made me more self-confident. I still feel the same feelings as before, but now I know that the way I feel is no different to other people. And I know the dark feelings will pass and when I feel that way it's like I now know I'll be able to deal with it no matter what life throws my way" • "It's made me realise that you don't have to be trapped, there are choices, you've just got to be aware of when you're trapping yourself and what opportunities, what sort of techniques, to try and get out of it"	• Understand self/insight – rediscovering lost identities? • Empowerment • New skills • More manageable / normalising
10	**(Leeming et al., 2009)** 8 (LQ)	Difficulties in using psychosocial explanations	Developing a psychosocial understanding, enabling participants to make sense of difficulties as reasonable and understandable. However, used these formulations less than medical explanations Formulations seen as causing difficulty by being too exposing, blaming others and challenging significant relationships, and unreasonably shedding patients' responsibility	• "I was only four when my mother died erm … if it does have any influence on you know, leading to depression, I don't know" (p.14) • "they're [psychosocial formulations] very personal … and very embarrassing" (p.14) • "I'd got the issue of abuse to deal with … I thought well maybe that caused it … I certainly wasn't forced to work to a resolution and a forgiveness but I did get there in the end, but … of course I was blaming the person that perpetuated the abuse um for my mental health problems as well. I mean I understand now that it can actually be a trigger but it's actually a trigger for something that's already there" (p.14)	• Understanding self / insight (use less than medical?) • Interpersonal "danger" • Emotional responses (negative)
		Diagnosis as both salvation and damnation	More confidence using medical diagnoses than psychosocial formulation as seemed to offer a stronger justification for and validation of their difficulties; also gave sense of relief. However, many also experienced diagnosis as implying something profoundly negative about themselves	• "I was relieved to get a diagnosis ['complex post-traumatic stress disorder'] because it (..) it made me feel less of a lesser person … that there's a reason for my difficulties. Validated – I felt validated, um (.) … I wasn't on my own…if you have trauma when … you're growing up as a child then it's	• Juxtaposition medical diagnosis (helpful vs. unhelpful)

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
				inevitable that you're going to have difficulties. So I didn't feel so (.) weak if you like." (p.15) • "I like feel bad enough about myself anyway, why do I need to feel bad about being anorexic now?" (p.16)	
12	**(Pain et al., 2008)** 16 (HQ)	Emotional/cognitive reaction	Mixed reactions, including negative, positive, neutral. Reactions could be associated with difficulty in processing the formulation	• "I read the letter and it made me sad" • "Gave me some sense of relief" • "Weeks and weeks of talking just condensed down to, to sort of the key points…it was sort of a bit daunting to start off with"	• Emotional/cognitive response (mixed)
		Therapeutic value	Anticipation of clinical improvement or increased understanding of the participants themselves, their problems, what to do to improve – versus no therapeutic value	• "A better understanding I think of what was actually occurring and how I can pull myself away from feeling bad when certain events occur" • "I don't actually understand why I do a lot of things I do, I still don't know"	• Increased understanding of self / insight (not always)
		Behaviour in relation to formulation	What participants did or intended to do with the formulation, including using it as a coping strategy, sharing it with others, or not thinking about it or using it again	• "I get a lot of these social stigmas, and it helps me sort of cope with how people treat you on the bus and that" • "I read it again with my wife" • "I haven't really thought about it to be honest"	• Doing something with it – or not • (Revisiting) • (Communication tool)
		Reflects experience/understanding	Described as accurate, inaccurate/incomplete, or uncertain	-	• How accurate it is
		Optimism/pessimism	Hopefulness versus hopelessness	-	• Emotional/cognitive response
		Change in relation over time	Better, worse, or no change	-	• Change over time
		Therapeutic relationship	Either a change for the better in reactions to the formulation over time, change for the worse, or no change	• "Certainly, it's not so painful now when I look at it" • "I was even more surprised that one or two things hadn't been included, it sort of stood out even more that they hadn't" • "I still think it's a bit pointless"	• Therapeutic alliance
14	**(Redhead et al., 2015)** 18 (HQ)	Formulation helps me to understand my problems through…	*…the diagram* – by helping visualize links (including between past difficulties and present distress), identify previously unacknowledged factors, making difficulties seem real and understanding them as 'normal'. Lack of visual and verbal clarity impeded understanding	• "You know where you are on the cycle ...you can see that you're anxious and you know you're going to get some physical symptoms" (p.458) • "When I first looked at it, it was like a great sort of gobbledegook, with different bits everywhere...I'm an everyday sort of person. And that's not everyday sort of language is it? And it's not. I want a Cognitive Model of Panic for dummies" (p.458)	• Creating distance • Tangibility? • Normalising • Insight/increasing understanding
			…the therapist's guidance – because participants' mental health problems compromised their own ability to comprehend. Therapists could facilitate understanding due to professional experience and knowledge	• "What felt really terrible, like the biggest drama on earth, was actually quite banal. It was so banal it could be explained by a diagram. It's like, hang on, this is dead normal. Millions of	• A collaborative endeavour

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
				people have studied this and it's as common as a cold" (p.459)	
			...perceived accuracy according to their subjective point of view	• "I really didn't have much understanding at all when I came to her, I was just too depressed. But...she was just able to, sort of, bring it back to the reasons why" (p.459) • "It all just made sense. I got it (the formulation), because it was true. It seemed true to me anyway, it was all what (sic) I felt" (p.459)	• Perceived accuracy
		Formulation leads to feeling understood and accepted through…	*...its perceived accuracy* *...the therapist's accepting stance* – a contrast to other people's attitudes towards their mental health problems, which helped patients view themselves in less pathologising way	• "It was bang on, so I trusted that she understood" (p. 459) • "I'd got it all out and someone hadn't gone, 'you're stupid'. He'd just taken it in and understood. And him getting it and explaining it, it helped me come to terms with it" (p.460)	• Perceived accuracy • Showing therapist understanding • Therapeutic alliance?
		Formulation leads to an emotional shift	*Relief* due to increased understanding of their own problems, and due to feeling understood by the therapist and more 'normal'	• "My thoughts were all floating around at random, it was like a sort of storm inside my brain. But the diagram kind of took the pressure off...understanding it all was just like, phew, the storm was gone" (p.460)	• Impact inaccuracy – potential for damage? • Increased understanding of self and by therapist • Normalising
			Distress, ranging from irritation that quickly passed to still feeling tearful at the time of the interview. Occurs for three main reasons: 1) Due to greater clarity about nature of problem. Painful feeling when they realised impact of past events on current difficulties, including feeling angry towards perpetrators or recognizing role of own behavior in difficulties and losses. For some, these feelings reduced over time	1)"I was spitting tacks to be honest with you" (p.461) "It still eats me. It [participant's difficulties] ruined a 9 year relationship. And I'm not able to draw a line under it yet. I can't, it still makes me feel really low and depressed, not only about my relationship ending, partly because of it, but about things I've missed 'cause of my excuses." (p.461) "I knew that it upset me, realising that it was all about having that abortion, but you do have to process it, and you do have to talk about it, and, you know, find some sort of outlet." (p.461)	• Emotional/cognitive response/shift (relief vs distress)
			2) Due to implications of the formulation for one's sense of identity (negative)	2) "It means I'm one of those people who self-harms really, like I'm drawing attention to myself" (p.461)	• Sense of identity – role in emotional response/experience
			3) Due to the therapist suggesting inaccurate formulations, especially during early stages of therapy. 2 patients were able to discuss this and revise formulation, one did not feel able to question therapist	3)"There were some factual things in it (the diagram), things she got wrong. Some judgemental things about the relative importance of different issues. But it wasn't worth arguing about, as I don't know what knowledge she had that I don't, from her training ...she could have been right" (p.461)	• Inaccuracy → negative emotional response; some able to question, others can-t
		Formulation enables me to move forwards	*Empowerment* – understanding their problems made them seem more controllable and increased confidence to move forwards	• "Seeing it all there, it gives you a different perspective...I just felt empowered that I could do something about them (the problems)" (p.462) • "The diagram made sense, just breaking it down into baby steps, so you could see where needed work. So we worked on	• Moving forward – over time • Communication tool (talking more openly) → about

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			Help to cope – enabled them to cope with problems and respond to difficult situations *Talking more openly* – some had shown diagram to others in their lives or enjoyed giving advice to people with similar problems *Comparisons with previous therapy* – CBT formulation enabled more forward moving than previous therapy	it, and planned for those situations" (p.462) • "I feel I can talk about it to people that I have actually got a fear about being sick...now I'm just like, I've got a fear, it's because when I was a kid, someone puked up by me, basically. I could explain it a bit more and I wouldn't have to feel funny about it" (p.462) • "I had this counselling earlier, that was you know, not effective, because it didn't give me a structure. But what CBT did, was it gave me a structure, a way to make sense of these pressures. The diagram made the difference" (p.463)	own formulation; to help others • Empowerment / confidence • Providing structure (compared to e.g. counselling)
15	**(Shine & Westacott, 2010)** 18.5 (HQ)	Feeling heard	Being listened to and understood, especially through hearing the reformulation letter being read aloud. Letter encourages reflective stance that enabled some clients to hear their story in a less critical and judgmental way and engendered trust in therapist	• "It made you feel as though somebody had taken on board what you had been saying…especially in the letter, to hear that back, what you'd told somebody, was, you know, quite emotional really" (p.169)	• Normalizing; understanding • Creating distance/reflective stance • Therapeutic alliance: engendering trust
		Understanding patterns	Increased self-awareness through understanding of their patterns of behaviour, including how had developed, how enacted in the present, and relationship between the two	• "I think that it has been helpful, and my awareness of some of the things that I tend to do… patterns that I get myself stuck in : : : but having someone else see them and write them down has made it clearer to me what tends to happen" (p.169)	• Understanding self – patterns / past vs. present /factors
		Space to talk	About their difficulties with an impartial other	• "Having space to talk about those problems with somebody… and somebody away from your immediate circle of people who… might pass judgement on you"(p.170)	• Safe space / normalising? accepted
		Feeling accepted	Not only by their therapist, which was potentially helpful in encouraging honesty and alliance, but also by themselves	• "I'm not back in the being judged thing…it (reformulation letter) made it so much more ordinary. It put me in the position of an observer. It helped me think, well, if this had happened to a stranger and they had coped like this, would I think that they were dreadful? No, I wouldn't … it was a huge relief" (p.170)	• Also creating distance from problems – seeing it on paper – perspective as "other" • Relief
		Having something tangible	To take away to help remember things and using the tools outside of therapy regarding recognition and revision of problems	• "And they've (reformulation letter and diagram) been quite useful to bring away with me, to have a look at and use them when I think they might be helpful…I'm not sure I would have remembered everything without them" (p.171)	• Tangibility • Revisiting
		Working together	Collaborative and interactive reformulation engendered a sense of ownership of the tools and therapy generally, leading clients to feel empowered and in control	• "My therapist had drawn this (diagram) out and each week we'd add a little bit to it, so I just put it on the computer to add little bits of colour to it" (p.171)	• Collaborative / working together • Empowered / control

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
		Feeling exposed	Discomfort of therapy, particularly around having to disclose information and hearing this back in reformulation letter	• "It's jolly hard work…and while I desperately want to be a different person I absolutely hate going through the past and the sort of analytical bit" (p.171)	• Emotional/cognitive response
			STAFF VIEWS ON FORMULATION WITH SUs (N=4)		•
2*	**(Chadwick et al., 2003)** 4.5 (LQ)	Positive effects	It is powerful and validating to have clients endorse the formulation. It helps increase hope regarding therapy, sense of alliance and collaboration, and that CBT is appropriate. It maintains adherence to CBT model and increases understanding of client's problems.	-	• Therapeutic alliance • Increasing understanding • Focus / structure for therapy • Collaborative
6	**(Halpin et al., 2016)**	Doing the case formulation: making connections and exploring	Making connections between past and present to increase understanding, and gaining insight as exploratory process	• "It wasn't until we kind of glued them together that we really looked at the whole kind of narrative and it is then that she looked at the patterns" (p.106)	• Insight of client – past vs present
	16 (HQ)	Value of case formulation: as an intervention and getting to know client better	It is powerful, akin to undertaking intervention, particularly when collaborative - elicits changes in lives and interpersonal patterns. Seeing the participant on a deeper level, including factors that may affect therapy	• "The formulation at times might be the therapy" • "Able to know the participant 'beyond just her diagnosis'" (p.106)	• Essential to therapists (especially in areas with no available evidence-based treatments), more mixed for clients? • As intervention • Interpersonal patterns • Increasing understanding of therapist
11*	**(Mohtashemi et al., 2016)**	Conceptualising formulation	Understanding of formulation, and views regarding how necessary it is, is a development process, contingent on training and individual differences. Can enhance understanding and may be particularly warranted when complexity, high level of risk, frequent service access	• "I can give them a DSM diagnosis…but actually I'd quite like to know where has that come from…that helps me understand the behavior, as it does in my opinion the patient…that's part of the hope bit"	• Increase therapist understanding (esp. complexity, risk) • Different views depending on training
	18 HQ	Singing off the same hymn sheet	Used as a language to communicate with patients, colleagues, external professionals – creating a unified understanding, integration of epistemological positions, allowing dynamics to be explored with teams Psychologists playing key role – especially when consulting with team (seen as better use of time than 1:1)	• "We use it with the psychology team…we do a formulation at the end to bring all that information together and say, well, where is this person likely to be going on their psychological journey and how can we prevent things from happening or understand why they're happening. And that informs the MDT"	• As a communication tool

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
		Barriers to formulation	Including time (to formulate within session; or during short-term admission), pressure to conform to medical model, psychology seen as a threat, and professional rivalry	• "You're trying to gather information from a variety of sources with someone you've not met before, who might not be with you for more than a few weeks so that takes a lot of time" • "They say you have to do reflective practice…we don't have the time" • "…there's some people who are reacting against that [challenging diagnosis] who are seeking to define what they do and in some ways narrow their understanding of a reductionist model to a purely biological, chemical based model"	• Barriers: time, juxtaposition diagnosis/medical model, professional rivalry
		Making a Frankenstein's monster	Consequences of not being able to develop a psychological understanding. Monster represented process of disjointed practice leading to repeated re-admissions, due to combination of lack of integrated understanding, overreliance on medication due to 'top-down' pressure and from patients, lack of resources	• "some of the time the patient comes in and says well I can't be bothered to sit down and talk so could you give me a pill" • "it's a false economy in my view…because you haven't done the formulation you don't understand what's going on…you just make more work for yourself"	• Dangers of not doing it?
13	**(Picken & Cogan, 2012)** 13 (LQ) (italics from paper)	Guiding assessment and intervention	Helping with *organising thoughts* in a *dynamic and evolving process* Role of formulation in *identifying or anticipating problems* and the reasons for them, including potential barriers in developing the therapeutic relationship or completing homework	-	• Providing focus / structure • Identifying possible ruptures
		Telling one's story	Formulation seen as process of sense making that added *meat on the bones* of diagnosis – diagnosis seen as framework and formul as adding richness of detail. Also highlighted importance of a *shared* understanding between therapist and client*;* recognising both strengths and difficulties	-	• Juxtaposition with diagnosis • Collaborative / shared understanding / accuracy?
		Formulation as an intervention	It is an active component in the treatment process: 1) *communication tool* for client to engage in process of meaning making and discussing difficulties with those in social support network 2) enabling clients to *gain a sense of empowerment* in understanding and dealing with presenting issues; identifying client as 'expert' in own lived experience	-	• As intervention • Communication tool • Empowerment (client expertise)
		Role of formulation in wider mental health field	Formulation as *cornerstone of our* (CP) *profession.* Concerns about deciding when a formulation is 'good enough' to guide therapeutic process. *Intangible quality* of	-	• Cornerstone of profession / professional identity

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			formulation adds to complexity in understanding, using and sharing formulations with clients and other professionals, questions regarding reliability and validity, and finding 'best fit' for client. Consideration whether formulation offers a full *alternative to diagnosis,* particularly relating to service development – measuring formulations and evaluating efficacy		• Accuracy • Guiding /structure for therapy • Intangibility – difficult to defend? • Communication tool – also from therapist • Juxtaposition / comparison with diagnosis
			STAFF VIEWS ON FORMULATION WITH COLLEAGUES (N=6)		
3	**(Christofides et al., 2012)** 18.5 (HQ)	The need for space and framework to help make sense of clients' difficulties together	Formulation is an effective use of time to help staff empathise with clients and improve staff-client interactions and team functioning – wider impact than working with individual clients. Most beneficial when discussing clients described as challenging. Can be used to encourage reflective skills to help staff understand emotional reactions and have broader understanding of clients	• "…my time [is] better spent helping nurses to practise more effectively or more psychologically…I can help nurses to help the patients" • "helping people shift where the stuck-ness is" • "…more understanding about why a person is doing what they're doing rather than it's just their illness, and helping people to see them a bit more as people" • "… fumbling in the dark … because if there's no theory or structure to hang an understanding on then they're floundering with an intervention, not really knowing why it's not working"	• Juxtaposition / comparison with diagnosis • Providing space • Improving staff-client relationships (therapeutic alliance?) • Best used with complexity / risk / challenge • Increase understanding • Providing structure
		'Chipping in' with psychological ideas as an ongoing process	Team formulation more via hypotheses suggested during team meetings, informal discussions of cases, clinical supervision, joint working (vs. letters, reports, risk assessment during 1:1 work)	• "just chipping away, throwing stuff into conversations, meetings, those kind of things, just to continually offer an alternative"	• 'Formal' team formulation vs. informal?
		• Defining the role of the psychologist	Defining role to themselves and within team once developed skill over time (vs. initially feeling work was difficult to define)	• "I think it's often hard to explain what clinical psychologists do, but I think it's easy to demonstrate"	• Professional identity / role
		• Team culture and the acceptance of alternative perspectives	Opportunity to compare practice across teams and think about what might enable more explicit discussion about use of formulation. Emotional challenge in some teams especially	• "I think it's much easier to be with people in a lot of distress if you take a very detached clinical view of it and your role is about giving injections and providing practical support, rather than thinking about the individual and what's going on for them"	• Team culture / acceptance
		• Acknowledging the experience of staff	Using expertise in formulation skills to facilitate/support staff to develop their own psychological understanding	• "They bring the knowledge and the information about the client and what they are like to work with, and I suppose	• Benefits to staff: increase

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
		and not taking the expert position		what I'm trying to provide in supervision is a structure for thinking about it so that they can put the two together and they've got something that makes sense"	psychological understanding
4	**(Craven-Staines, Dexter-Smith et al., 2010b)**	Impact of formulation training and naming versus explaining the model	More articulate and coherent regarding theoretical underpinnings – able to describe model even if not always able to name	• "We discussed the five Ps, predisposing, precipitating, predicting, protective, presenting ... looking at from the CBT approach ... looking at thought process, automatic thoughts, core beliefs, rules for living ... and then when you get all the information together ... you use that to formulate kind of a plan"	• Language? Communication tool?
	13 (LQ)	Increased understanding of the client		• Even when you know the patient completely, there are still some blind spots which you ignore or go unnoticed. Each person from the disciplines sees the person from a different perspective so it's more than likely that we are able to cover most of the needs the person requires	• Increase staff understanding
		Care planning – implementing and monitoring	Positive impact on quality of care by developing individualized care plans; helps regular monitoring of shared care plans	• like the way that you end up having a clear idea of what your role is in the process. Rather than having a care plan for OT, the nurses having a care plan and psychology having a care plan, it we've all got one then we are working from the same song book	• Benefits to SUs • Informing care plans
		Clear strategy for disseminating information	Draw together information, document this, and able to disseminate to other members of team	• You get a more holistic, clear view, plus it's accessible on the [electronic record system] for other staff to quickly read through, to get the most of the person, as opposed to finding different information from separate locations, all around case notes or case files	• Communication tool
		Improving thought processes	Think differently about clinical work	• I have learned new skills and it has also made me think more about my approach. Maybe it's my approach that is activating some of the challenging behaviours	• Insight into own impact? Skills?
		Multidisciplinary working	Improves this – highlights importance using different professional skills	• I think because it gets everybody together so its multidisciplinary, everybody involved in the person's care is able to get together and look at the information ...	• Collaborative - working with others
		Time commitments	Main barrier is amount of time needed to prepare for, gather information, and conduct formulation	• "I think probably the time. I think getting everybody together, and workload, and time commitment"	• Barriers - time
		Greater knowledge of own and others' roles		• "It gave you quite clear, defined roles about how you'd deal with her ... who would deal with her ... who would not deal with her ... cause we did have cases where we'd have to say who wouldn't."	• Professional roles
8	**(Hollingsworth & Johnstone, 2014)** 10 (LQ)	Team working	Team formulation is helpful in developing shared team understanding, a consistent team approach, and improving ability to work collaboratively.	• "…holding formulation meetings enables services to progress and be fluent in implementation… it has provided staff with consistent ways in which to interact with the service user" (p.31)	• Collaborative working - bringing together knowledge and skills

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			Benefits in drawing on knowledge and skills of different professionals and not taking an 'expert' position	• "the thing that struck me was that no discipline carried more weight than another… allowing unqualified staff to be involved in planning care…" (p.31)	
		Intervention planning and confidence	Generating new ideas about working with patients, developing intervention plans, improving risk management, increasing confidence when working with complexity	• "When clients with difficult needs have found themselves stuck on the in-patient ward, the formulations have generally encouraged the MDT [multidisciplinary team] to find a safe and mutually agreeable way forward out of the ward and back home for the client" (p.32)	• Informing intervention / care plan?
		Understanding of service users' needs and behaviour		• I found the team formulation meeting was most helpful in helping me to have a greater understanding of the service user's condition and provided me with reasons for her behaviour" (p.32)	• Increase staff understanding
11*	**(Mohtashemi et al., 2016)** 18 (HQ)	Conceptualising formulation	Understanding of formulation, and views regarding how necessary it is, is a development process, contingent on training and individual differences. Can enhance understanding and may be particularly warranted when complexity, high level of risk, frequent service access	• I can give them a DSM diagnosis…but actually I'd quite like to know where has that come from…that helps me understand the behavior, as it does in my opinion the patient…that's part of the hope bit	• Increase staff understanding (esp. complexity, risk)
		Singing off the same hymn sheet	Used as a language to communicate with patients, colleagues, external professionals – creating a unified understanding, integration of epistemological positions, allowing dynamics to be explored with teams Psychologists playing key role – especially when consulting with team (seen as better use of time than 1:1)	• We use it with the psychology team…we do a formulation at the end to bring all that information together and say, well, where is this person likely to be going on their psychological journey and how can we prevent things from happening or understand why they're happening. And that informs the MDT	• Communication tool
		Barriers to formulation	Including time (to formulate within session; or during short-term admission), pressure to conform to medical model, psychology seen as a threat, and professional rivalry	• You're trying to gather information from a variety of sources with someone you've not met before, who might not be with you for more than a few weeks so that takes a lot of time • They say you have to do reflective practice…we don't have the time • …there's some people who are reacting against that [challenging diagnosis] who are seeking to define what they do and in some ways narrow their understanding of a reductionist model to a purely biological, chemical based model	• Barriers • Comparison diagnosis/medical model
		Making a Frankenstein's monster	Consequences of not being able to develop a psychological understanding. Monster represented process of disjointed practice leading to repeated re-admissions, due to combination of lack of integrated understanding, overreliance on medication due to 'top-down' pressure and from patients, lack of resources	• some of the time the patient comes in and says well I can't be bothered to sit down and talk so could you give me a pill • it's a false economy in my view…because you haven't done the formulation you don't understand what's going on…you just make more work for yourself	• Consequences of NOT doing formulation – lack of collaboration
16	**(Summers, 2006)**	Overall impact	Seen as predominantly positive	• "One of the most productive things on the ward…a richness	•

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
	14 (LQ)		Drawbacks included: limited impact on care; problems in incomplete information or excessive emphasis on speculative suggestions; too much information might lead to wrong perspectives; past could be overemphasised and used as an excuse	which you don't pick up from the notes or (the patient)" (p.342) • "They could be more productive …need to guide care plans more" (p.342) • "[they're]a projective vehicle... a fantasy space for speculation, guess the pathology, games…staff dynamics, who's got the loudest voice, some people wanting to be right or more powerful…pop psychology" (p.342)	
		Dimensions of benefit	Four dimensions: 1) Ideas for management 2) Better staff-patient relationships 3) Individual staff satisfaction 4) Improved team working	1) "gives you a way of working that you might not have seen…gives direction. We were reminded of her sensitivity to rejection, so re-wrote some care plans in the light of this" 2) "makes me more tolerant, more patient… increases empathy" 3) "helps when the patient is demanding, it took away the sting" 4) "gives a knock on, everyone part of the team" (all p.342)	• Benefits of (see specifics)
		Mechanisms of benefit	Three areas: 1)Valuing the meetings specifically and way they bring together people and ideas; combining different information and perspectives; leaving staff feeling valued, part of the team, or able to have their say 2) Helped staff knowledge and understanding of patients 3) Space to think creatively ('time out') with a chance to talk without an illness or management focus, to discuss ideas, make links to theory and allow new things to emerge	1) "Together, we might see something that separately we can't see. People had forgotten factors impacting on care now. Nice getting all levels and disciplines, it gives a knock on, every- one part of the team" 2) "Afterwards, the problems seemed understandable, some-thing we could start to address" 3) "brings things to consciousness…brings out patterns. People were able to say more positive things about her…different …from other meetings about her …maybe because it wasn't focused on her management" (all p.342)	• Increasing staff understanding • Having space • Valuing the meetings (collaboration)
		Convictions competing or shared uncertainty	Some viewed formulations as statements of fact, helpful through being 'right' and leading to 'correct' management. They valued a chance to get their views heard and disinclined to get 'wrong' perspectives through reading 'too deeply' Others valued being able to speculate and discuss ideas, seeing their own and others' views as provisional, and formulations as hypotheses	• "space to think…be playful, say - what about this?... [suggestions] feel both more useful and more accurate - and vaguer" (p.342)	• Accuracy of formulation: absolute truth vs provisional / shared uncertainty
17	**(Wainwright & Bergin, 2010)** 10.5 (LQ)	How staff understand Service Users	• *By making sense* –allowed them to take a deeper and more complex look at SUs • *In terms of non-linked descriptive information*	• "When talking to you they see more black-and-white bits, but you can get a different idea and get the complexity. I've started doing that, and now do it without thinking" (p.40)	• Increasing staff understanding
		Factors influencing whether there is a shared understanding of Service Users	• *Factors that helped develop a shared understanding:* good team working, use of written documentation, the team getting together	• "I definitely think that formulation can help, but it is a process that needs some work to keep going. Needs to direct people" (p.40)	• Motivators to (collaboration; written down – tangible?)

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			• *Barriers to a shared understanding:* staff not working as a team, a lack of time and resources, concerns that formulation meetings needed further work to continue		• Barriers to (lack of time; collaboration)
		Psychological factors in care plans	• *Psychological factors are used to make sense* in care plans, and formulation meetings had positive impact on this • *Psychological factors routinely included* in care plans – latent inference that they are *not* routinely included but that they should be • *Unhelpful inclusion of psychological formulation* – when lack of SU consent about sensitive material being included in care plans, lack of staff agreement about what was important • *Care plans lack psychological factors* – based on diagnosis and heuristics rather than individual presentations	-	• Links to care plans – team wanting utility of formulation? Does this change nature of formulation? Or in line with formulation informing intervention? • Danger of team formulation: lack of consent re sensitive info
		Staff relationships with Service Users	• *Factors that help empathy and tolerance* – formulation meetings increased following factors: having an understanding of SU's problems, feeling they could move forward and help SUs, SU's story evoking emotion • *Factors that damage empathy and tolerance* – difficulty gaining an understanding of a SU's presentation, challenging behaviour, not feeling able to help, encountering similar issues to a SU in their own personal life	• "Her self harming was a cry for help for her" (p.42) • "Like when patients get violent and abusive for no reason" (p.42)	• Moving forward / providing focus? • Emotional / cognitive response in staff • Increasing empathy and tolerance
		Staff involvement in care planning	• *Perceived involvement in care planning* – primarily seen as a nursing-led role; some participants did not feel involved in process • *How care plans could be improved* – more staff to be involved, more education around care plans, need for them to be developed and used more consistently • *Care plans are lacking* in psychological thinking and not seen as meaningful	• "They tend to have practical things in them, and are not so psychological" (p.42)	• Beyond / usability?: informing care planning / provision
		Staff thoughts on formulations meetings	• *Impacts on care* by increasing understanding of SUs • *They fill a gap* • *Formulation meetings are useful* • *Need to get more people involved,* including more staff, SUs, and Carers	• "staff can see why the patient is here, who is doing what, and why everyone is having the same approach" (p.42)	Staff views • The meeting - providing space? • The formulation - usability and longevity

No	Paper & quality	Second-order construct	Description	Examples (first-order constructs)	Notes
			• *Need to make sure the formulation is used* to inform continued input with the SU, rather than it being lost once completed		

*Paper in more than one category

Names of participant quotes omitted to enhance confidentiality

Appendix E (SIP): Author Guidelines (*Journal of Mental Health*)

Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read and follow them as closely as possible, as doing so will ensure your paper matches the journal's requirements. For general guidance on the publication process at Taylor & Francis please visit our Author Services website.

This journal uses ScholarOne Manuscripts (previously Manuscript Central) to peer review manuscript submissions. Please read the guide for ScholarOne authors before making a submission. Complete guidelines for preparing and submitting your manuscript to this journal are provided below.

Submissions

All submissions, including book reviews, should be made online at Journal of Mental Health's Manuscript Central site at http://mc.manuscriptcentral.com/cjmh

New users should first create an account. Once a user is logged onto the site submissions should be made via the Author Centre. Please note that submissions missing reviewer suggestions are likely to be un-submitted and authors asked to add this information before resubmitting. Authors will be asked to add this information in section 4 of the on-line submission process.

Manuscripts will be dealt with by the Executive Editor. It is essential that authors pay attention to the guidelines to avoid unnecessary delays in the evaluation process.

The names of authors should not be displayed on figures, tables or footnotes to facilitate blind reviewing.

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The Editors and Taylor & Francis Group are committed to the highest academic, professional, legal, and ethical standards in publishing work in this journal. To this end, we have adopted a set of guidelines, to which all submitting authors are expected to adhere, to assure integrity and ethical publishing for authors, reviewers, and editors.

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Word Count

The total word count for review articles should be no more than 6000 words. Original articles should be no more than a total of 4000 words. We do not include the abstract, tables and references in this word count. However manuscripts are limited to a maximum of 4 tables and 2 figures.

Book Reviews

All books for reviewing should be sent directly to Martin Guha, Book Reviews Editor, Information Services & Systems, Institute of Psychiatry, KCL, De Crespigny Park, PO Box 18, London, SE5 8AF.

Manuscript Style

Manuscripts should be typed double-spaced (including references), with margins of at least 2.5cm (1 inch). The cover page (uploaded separately from the main manuscript) should show the full title of the paper, a short title not exceeding 45 characters (to be used as a running title at the head of each page), the full names, the exact word length of the paper and affiliations of authors and the address where the work was carried out.

The corresponding author should be identified, giving full postal address, telephone, fax number and email address if available. To expedite blind reviewing, no other pages in the manuscript should identify the authors. All pages should be numbered.

Abstracts: The first page of the main manuscript should also show the title, together with a structured abstract of no more than 200 words, using the following headings: Background, Aims, Method, Results, Conclusions, Declaration of interest. The declaration of interest should acknowledge all financial support and any financial relationship that may pose a conflict of interest. Acknowledgement of individuals should be confined to those who contributed to the article's intellectual or technical content.

Keywords: Authors will be asked to submit key words with their article, one taken from the pick-list provided to specify subject of study, and at least one other of their own choice.

Text: Follow this order when typing manuscripts: Title, Authors, Affiliations, Abstract, Keywords, Main text, Appendix, References, Figures, Tables. Footnotes should be avoided where possible. The total word count for review articles should be no more than 6000 words. Original articles should be no more than a total of 4000 words. We do not include the abstract, tables and references in this word count. Language should be in the style of the APA (see Publication Manual of the American Psychological Association, Fifth Edition, 2001).

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Appendix F (SIP): Steering Group Terms of Reference

Committee	Sycamore Ward Project Advisory/Steering Group*
Purpose	• To ensure the project meets service (Sycamore Ward), service user, and carer needs and interests by giving and receiving input in person, over the phone, or over email as the project is developed • To maintain awareness of direct experience perspectives, thus improving recruitment, dissemination, and outcomes • To ensure the project stays on track and is acceptable and suitable to those involved
Membership	Membership would ideally consist of: • 2 Sycamore Ward staff members (including 1 senior staff member): • A service user with experience of being on Sycamore Ward: • A carer of a service user who has been on Sycamore Ward • Jara Falkenburg (Chief Investigator) • Katharine Christie (Field Supervisor)
Terms of membership	It is hoped members could be part of the Advisory Group for the duration of the study (until approx. May 2017)
Frequency of meetings	It is hoped regular face-to-face and/or phone meetings can be arranged (e.g. once every 1-2 months). It is likely these meetings will only happen during the data collection period (approx. June-Sept 2016) and dissemination period (approx. Dec 2016-May 2017)
Project summary	The project hopes to benefit Sycamore Ward staff, service users, and their carers by evaluating how the activities that are currently being offered on the ward are perceived by: 1) current inpatients; 2) discharged inpatients; 3) carers of current/discharged inpatients; and 4) Sycamore Ward staff. It aims to do this by running four focus groups (one for each aforementioned group, involving 5-7 participants per group), which should hopefully lead to a better understanding alongside some useful recommendations. This service evaluation is in line with recent calls for qualitative research into inpatient activities by NICE, CQC, and various other bodies. The project is being carried out as part of Jara Falkenburg's Doctorate in Clinical Psychology at the University of Bath.

Note. *Edited from original; names have been omitted

Appendix G (SIP): Ethical Approval

University of Bath's Psychology Department Research Ethics Committee.

From: psychology-ethics <psychology-ethics@bath.ac.uk>
Subject: Re: Ethics 16-047
Date: 26 May 2016 at 23:14:49 BST
To: Jara Falkenburg <J.Falkenburg@bath.ac.uk>

Dear Jara Falkenburg

Reference Number: 16-047 Patient, Staff and Carer views of psychiatric ward activities and efforts to increase choice

Thank you for satisfactorily attending to those amendments. I can now confirm that you have full ethical approval for your study.

Best wishes with your research.

Dr Michael J Proulx
Chair Psychology Ethics Committee

AWP Quality Academy.

Avon and Wiltshire NHS
Mental Health Partnership NHS Trust

Avon and Wiltshire Mental Health Partnership AWP Trust
AWP Quality Academy
Fromeside- East Wing
Manor Road
Fishponds
BS16 2EW

0117 378 4238/ 07825 725296

Jara Falkenburg
Clinical Psychologist in Training
University of Bath

Date: 25th May 2016

Dear Jara

Patient, Staff, and Carer Views of Psychiatric Ward Activities and Efforts to Increase Choice
AWP Reference: E2016.E008 Falkenburg

This letter is to confirm that your evaluation is now approved and also provides you with our reference number.

If you do need any further support or information, please contact us using the contact details above, quoting our reference number for your study.

The importance of disseminating all evaluation work cannot be over emphasised. It is only by sharing our learning that we can improve services across AWP. For this reason, the findings of all evaluation work should be reported to the Evaluation team via email. The team will champion the results of service evaluations, and work with evaluators to ensure those results are disseminated and acted upon, and that the results of evaluations are reflected in future service delivery. The team will also work with evaluators to produce publications for the public domain.

I very much look forward to receiving the results of your evaluation in due course.

Yours sincerely,

Janet Brandling

Appendix H (SIP): Approximate Percentage of Focus Group Time Taken Up by Each Participant*

Participant	Percentage of focus group
Inpatient 1 (I1)	41.93%
Inpatient 2 (I2)	25.35%
Inpatient 3 (I3)	13.61%
Staff 1 (S1)	8.17%
Staff 2 (S2)	16.26%
Staff 3 (S3)	37.01%
Staff 4 (S4)	8.45%
Staff 5 (S5)	3.57%
Staff 6 (S6)	7.93%
Staff 7 (S7)	7.71%

Note. *Based on calculations by NVivo for Mac (10)

Appendix I (MRP): Author Guidelines (*Behaviour Research and Therapy*)

The major focus of *Behaviour Research and Therapy* is an experimental psychopathology approach to understanding emotional and behavioral disorders and their prevention and treatment, using cognitive, behavioral, and psychophysiological (including neural) methods and models. This includes laboratory-based experimental studies with healthy, at risk and subclinical individuals that inform clinical application as well as studies with clinically severe samples. The following types of submissions are encouraged: theoretical reviews of mechanisms that contribute to psychopathology and that offer new treatment targets; tests of novel, mechanistically focused psychological interventions, especially ones that include theory-driven or experimentally-derived predictors, moderators and mediators; and innovations in dissemination and implementation of evidence-based practices into clinical practice in psychology and associated fields, especially those that target underlying mechanisms or focus on novel approaches to treatment delivery. In addition to traditional psychological disorders, the scope of the journal includes behavioural medicine (e.g., chronic pain). The journal will not consider manuscripts dealing primarily with measurement, psychometric analyses, and personality assessment.

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Any questions regarding your submission should be addressed to the Editor in Chief:

Professor Michelle G. Craske
Department of Psychology
310 825-8403
Email: brat@psych.ucla.edu

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Reference to a journal publication:
Van der Geer, J., Hanraads, J. A. J., & Lupton, R. A. (2010). The art of writing a scientific article. *Journal of Scientific Communications, 163*, 51–59.
Reference to a book:
Strunk, W., Jr., & White, E. B. (2000). *The elements of style.* (4th ed.). New York: Longman, (Chapter 4).
Reference to a chapter in an edited book:
Mettam, G. R., & Adams, L. B. (2009). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281–304). New York: E-Publishing Inc.
Reference to a website:
Cancer Research UK. Cancer statistics reports for the UK. (2003). http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/ Accessed 13.03.03.
Reference to a dataset:
[dataset] Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T. (2015). *Mortality data for Japanese oak wilt disease and surrounding forest compositions*. Mendeley Data, v1. https://doi.org/10.17632/xwj98nb39r.1.

Video

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Supplementary material

Supplementary material such as applications, images and sound clips, can be published with your

article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

AudioSlides

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

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Appendix J (MRP): Ethical Approval

University of Bath Approval.

From: psychology-ethics <psychology-ethics@bath.ac.uk>
Subject: Ethics 16-253 What do the effects of an anxiety-task on state social anxiety and paranoia show about their relationship and the role of imagery? A mixed methods study.
Date: 17 October 2016 at 14:46:40 BST
To: Jara Falkenburg <J.Falkenburg@bath.ac.uk>

Dear Jara,

RE: 16-253 What do the effects of an anxiety-task on state social anxiety and paranoia show about their relationship and the role of imagery? A mixed methods study.

The ethics committee have deliberated over this application and are happy to give this project full ethical approval.

Best of luck with your data collection,

Dr. Nathalia Gjersoe
Chair, Psychology Ethics Committee

Health Research Authority Approval.

NHS
Health Research Authority

Ms. Jara Falkenburg
Clinical Psychologist in Training
Taunton and Somerset NHS Trust
10 West, Department of Clinical Psychology,
University of Bath
Claverton Down, Bath
North East Somerset
BA2 7AY

Email: hra.approval@nhs.net

02 February 2017

Dear Ms Falkenburg,

Letter of HRA Approval

Study title:	**What do the effects of an anxiety-task on state social anxiety and paranoia show about their relationship and the role of imagery? A mixed methods study**
IRAS project ID:	**199896**
Protocol number:	**N/A**
REC reference:	**16/WA/0362**
Sponsor	**University of Bath**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details and further information about working with the research management function for each organisation can be accessed from www.hra.nhs.uk/hra-approval.

Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

After HRA Approval

The document *"After Ethical Review – guidance for sponsors and investigators",* issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

In addition to the guidance in the above, please note the following:

- HRA Approval applies for the duration of your REC favourable opinion, unless otherwise notified in writing by the HRA.
- Substantial amendments should be submitted directly to the Research Ethics Committee, as detailed in the *After Ethical Review* document. Non-substantial amendments should be submitted for review by the HRA using the form provided on the HRA website, and emailed to hra.amendments@nhs.net.
- The HRA will categorise amendments (substantial and non-substantial) and issue confirmation of continued HRA Approval. Further details can be found on the HRA website.

Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found at http://www.hra.nhs.uk/resources/applying-for-reviews/nhs-hsc-rd-review/.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

IRAS project ID	199896

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please email the HRA at hra.approval@nhs.net. Additionally, one of our staff would be happy to call and discuss your experience of HRA Approval.

HRA Training

We are pleased to welcome researchers and research management staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

Your IRAS project ID is **199896**. Please quote this on all correspondence.

Yours sincerely

Thomas Fairman
HRA Assessor

Email: hra.approval@nhs.net

Copy to: *Professor Jonathan Knight, University of Bath, (Sponsor Contact)*
Mr Genevieve Riley, 2gether NHS Foundation Trust, (Lead NHS R&D Contact)

IRAS project ID	199896

Appendix A - List of Documents

The final document set assessed and approved by HRA Approval is listed below.

Document	*Version*	*Date*
Copies of advertisement materials for research participants [Study advertisement]	2	21 November 2016
Covering letter on headed paper [Covering letter on headed paper]	1	15 October 2016
Covering letter on headed paper [Covering Letter for REC November decision]		20 November 2016
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Certificate of Employers' Liability Insurance]		18 July 2016
Interview schedules or topic guides for participants [Anagram Cards]		04 November 2016
Interview schedules or topic guides for participants [Optional interview - Anagrams Instructions]	1	01 June 2016
Interview schedules or topic guides for participants [Optional interview - ratings (document headed Semi-structured interview: rating scales]		
Interview schedules or topic guides for participants [Relaxation exercises pack]	1	22 August 2016
Interview schedules or topic guides for participants [Relaxation exercises]		03 November 2016
Interview schedules or topic guides for participants [Debrief sheet]	1	26 April 2016
Interview schedules or topic guides for participants [Optional interview - ratings (document headed Semi-structured interview: rating scales]	1	04 August 2016
Interview schedules or topic guides for participants [Relaxation Exercises]	1	03 November 2016
Interview schedules or topic guides for participants [Debrief sheet]	2	23 November 2016
Interview schedules or topic guides for participants [Anagrams Cards]	1	04 November 2016
IRAS Application Form [IRAS_Form_01112016]		01 November 2016
IRAS Checklist XML [Checklist_01112016]		01 November 2016
Letter from sponsor [Letter from sponsor]	1	27 September 2016
Letters of invitation to participant [Letter of invitation to participant]		
Letters of invitation to participant [Invitation Letter]	2	20 November 2016
Non-validated questionnaire [Visual analogue scale]	1	01 June 2016
Other [Supervisor Response Letter]		20 November 2016
Other [Anxiety & Deception De-Escalation Procedure (Flow-Chart)]	1	20 November 2016
Other [Sponsor confirmation of non-substantial amendment]		30 January 2017
Other [HRA Schedule of Events PIC]	1	02 February 2017
Other [HRA Statement of Activities]	1	02 February 2017
Participant consent form [PRE Consent Form]	4	02 February 2017
Participant consent form [POST Debrief Consent Form]	4	02 February 2017
Participant consent form [Participant consent form with GP Information]	1	25 November 2016
Participant information sheet (PIS) [Participant Info Booklet]	4	02 February 2017
Research protocol or project proposal [Protocol]	2	20 November 2016
Summary CV for Chief Investigator (CI) [CI Summary CV]	1	14 October 2016
Summary CV for supervisor (student research) [Summary CV for academic supervisor 2]	1	14 October 2016

IRAS project ID	199896

Summary CV for supervisor (student research) [Summary CV for academic supervisor 1]	1	14 October 2016
Summary CV for supervisor (student research) [Summary CV for field supervisor]	1	17 October 2016
Summary, synopsis or diagram (flowchart) of protocol in non technical language [Flowchart of protocol]	1	14 October 2016
Validated questionnaire [Green et al Paranoid Thoughts Scale]		
Validated questionnaire [DASS-21]		
Validated questionnaire [Social Anxiety Scales]		
Validated questionnaire [Demographic questionnaire]	1	01 June 2016

IRAS project ID	199896

Appendix B - Summary of HRA Assessment

This appendix provides assurance to you, the sponsor and the NHS in England that the study, as reviewed for HRA Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England to assist in assessing and arranging capacity and capability.

For information on how the sponsor should be working with participating NHS organisations in England, please refer to the, *participating NHS organisations, capacity and capability* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections in this appendix.

The following person is the sponsor contact for the purpose of addressing participating organisation questions relating to the study:

Name: Professor Jonathan Knight
Tel: 01225 383162
Email: pro-vc-research@bath.ac.uk

HRA assessment criteria

Section	HRA Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	No comments
2.1	Participant information/consent documents and consent process	Yes	No comments
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	The sponsor has submitted the HRA Statement of Activities and intends for this to form the agreement between the sponsor and study sites. The sponsor is not requesting, and does not require any additional contracts with study sites.
4.2	Insurance/indemnity	Yes	Where applicable, independent contractors (e.g. General Practitioners)

IRAS project ID	199896

Section	HRA Assessment Criteria	Compliant with Standards	Comments
	arrangements assessed		should ensure that the professional indemnity provided by their medical defence organisation covers the activities expected of them for this research study
4.3	Financial arrangements assessed	Yes	No application for external funding has been made. No study funding will be provided to sites, as detailed at Schedule 1 of the Statement of Activities.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments
5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Yes	REC Favourable Opinion was issued by the Wales Research Ethics Committee 2 on the 16th December 2016 Amended documents were submitted on by the researchers to comply with HRA Approval standards. These were classified by the sponsor as a non-substantial amendment.
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

Participating NHS Organisations in England

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.

All participating NHS organisations will undertake the same study activities. There is therefore only one study site 'type' involved in the research.

The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. For NIHR CRN Portfolio studies, the Local LCRN contact should also be copied into this correspondence. For further guidance on working with participating NHS organisations please see the HRA website.

If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England which are not provided in IRAS or on the HRA website, the chief investigator, sponsor or principal investigator should notify the HRA immediately at hra.approval@nhs.net. The HRA will work with these organisations to achieve a consistent approach to information provision.

Confirmation of Capacity and Capability

This describes whether formal confirmation of capacity and capability is expected from participating NHS organisations in England.

NHS organisations in England that are participating in the study **will be expected to formally confirm their capacity and capability** to host this research.

- Following issue of this letter, participating NHS organisations in England may now confirm to the sponsor their capacity and capability to host this research, when ready to do so. How capacity and capacity will be confirmed is detailed in the Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria) section of this appendix.
- The Assessing, Arranging, and Confirming document on the HRA website provides further information for the sponsor and NHS organisations on assessing, arranging and confirming capacity and capability.

Principal Investigator Suitability

This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and the minimum expectations for education, training and experience that PIs should meet (where applicable).

No Principal Investigator or Local Collaborator is required at study sites. Instead the Chief Investigator will take local responsibility for study activities.

GCP training is not a generic training expectation, in line with the HRA statement on training expectations.

HR Good Practice Resource Pack Expectations

AWAIT RESEARCHERS - AMEND IF

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken
The research team have confirmed in IRAS that all local study activities detailed at A18 and A19 will be undertaken by local staff with pre-existing access arrangements. If any activities are undertaken by external staff then these individuals would be expected to obtain a Letter of Access for this purpose. This would be on the basis of a Research Passport (if university employed) or an NHS to NHS confirmation of pre-engagement checks letter (if NHS employed). Pre-engagement checks should confirm standard DBS checks and occupational health clearance.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England to aid study set-up.
The applicant has indicated that they do not intend to apply for inclusion on the NIHR CRN Portfolio.

Avon and Wiltshire Mental Health Partnership NHS Trust Approval.

From: "ARMSTRONG-JAMES, Laura (AVON AND WILTSHIRE MENTAL HEALTH PARTNERSHIP NHS TRUST)" <laura.armstrong-james@nhs.net>
Subject: 990AWP R&D confirmation
Date: 24 February 2017 at 16:24:14 GMT
To: Jara Falkenburg <J.Falkenburg@bath.ac.uk>
Cc: Megan Wilkinson-Tough <M.J.Wilkinson-Tough@bath.ac.uk>, Lorna Hogg <L.I.Hogg@bath.ac.uk>, "HORNER-BAGGS, Louise (2GETHER NHS FOUNDATION TRUST)" <l.horner-baggs@nhs.net>

Dear Jara,

Title of study: Effects of an Anxiety-Task on Social Anxiety, Paranoia & Imagery v1
AWP ref. 990AWP
R&D confirmation date: 24 February 2017
Recruitment end date: 30 September 2017
Study end date: 30 September 2017

Thank you very much for applying to undertake your research in AWP, we pride ourselves on a straight forward and rapid process for research governance.

We are pleased to advise we are able to grant R&D Confirmation at Avon and Wiltshire Mental Health Partnership NHS Trust ("the Trust") to cover the locations as stated above. Please find attached the AWP logo to use on any local documents you will be issuing i.e. information sheets and consent forms.

Under the conditions of approval, you are required to:

1. Document any study activity on RiO for the relevant patient records, if applicable. Please refer to the attached RiO guidance document. If you do not have access to RiO and only need to update service user's records as above, you can ask a member of the clinical team to do this for you. Please ensure the attached procedures are still adhered to. If you need access to RiO for any other reason, please advise the AWP R&D office using the contact details below.

2. Update recruitment figures regularly via EDGE (a Clinical Management System). This enables us to keep a clear track of all Trust-wide study activity, which we need to report to our research funders. **Failure to comply with this will result in your research being suspended, so please make sure you complete this on a monthly basis.** We will set up an account for you, and your login instructions will be emailed to you. Please refer to the attached EDGE guidance document.

3. Notify us if you plan to recruit participants from any clinical team not outlined above.

4. To meet AWP R&D audit requirements and adhere to Good Clinical Practice guidelines, you will also need to ensue you create and manage a study site file. If you need more information on this please contact the AWP R&D department or visit the NIHR website: http://www.crn.nihr.ac.uk/learning-development/good-clinical-practice/gcp-resources-templates-and-reference-documents/

The R&D Management Permission in the Trust is valid until 30 September 2017. If you require any extension to this in the future please contact us to arrange.

We hope you are successful in your recruitment aims and objectives.

Study Amendments:
For further information regarding how to notify us of any amendments to your study please refer to the amendments guidance found at:
http://www.hra.nhs.uk/research-community/during-your-research-project/amendments/

Event reporting:
You are reminded you must report any adverse event or incident whether or not you feel it is serious, quoting the study reference number. This requirement is in addition to informing the Chairman of the relevant Research Ethics Committee.

At the end of your research:
You are required to submit to the Associate Director of Research & Development (Hannah Antoniades) a final outcome report on completion of your study, and if necessary to provide interim annual reports on progress. Should publications arise, please also send copies for inclusion in the study's site file. This way we can ensure those involved within the Trust are aware of your findings and can consider your recommendations. Please send a copy of your final report to **awp.research@nhs.net**.

General Research Governance Information:
You must also abide by the research and information governance requirements for any research conducted within the NHS:

- Work must be carried out in line with the Research Governance Framework which details the responsibilities of everyone involved in research.
- You must comply with the Data Protection Act 1998 and where required, have up to date Data Protection Registration with the Information Commissioners Office. Where staff are employed, this includes having robust contracts of employment in place and ensuring that staff are made aware of their obligations through training and similar initiatives.
- You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice: (http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4069253)
- You must have appropriate policies and procedures in place covering the security, storage, transfer and disposal of information both personal and sensitive, or corporate sensitive information. Any information security breach must be reported immediately to the Trust.
- Where access is granted to sensitive corporate information, this must not be further disclosed without the explicit consent of the Trust unless there is an override required by law. Where disclosure is required under the Freedom of Information Act 2000, the Trust will assist you in processing the request.

Please note that, as a public authority, the Trust is obligated to comply with the provisions of the Freedom of Information Act 2000, including the potential disclosure of information held by the Trust in connection with this study. Where a request for potential disclosure of personal, corporate sensitive, or contract information is made under the Freedom of Information Act 2000, due regard shall be made to any duty of confidentiality or commercial interest.

Best wishes,

Hannah Antoniades
Associate Director of Research & Development
Avon and Wiltshire Mental Health Partnership NHS Trust

2gether NHS Foundation Trust Approval.

Gloucestershire NHS
Research Support Service

First Floor
Leadon House
Gloucestershire Royal Hospital
Great Western Road
Gloucester
GL1 3NN

Tel: 03004 225466
Fax: 03004 225469
www.gloshospitals.nhs.uk
Email: glos.rdsu@glos.nhs.uk

Monday, February 27, 2017

Jara Falkenburg
Clinical Psychologist in Training,
Doctorate in Clinical Psychology
Clinical Psychology Research & Training
Department of Psychology
University of Bath
Claverton Down
Bath
BA2 7AY

Letter of access for research for:

Study Title: What do the effects of an anxiety-task on state social anxiety and paranoia show about their relationship and the role of imagery? A mixed methods study

REC Ref: 16/WA/0362
R&D Reference: 17/002/2gt

Research Site: 2gether NHS Foundation Trust

Dear Jara,

This letter should be presented to each participating organisation before you commence your research at that site.

In accepting this letter, each participating organisation confirms your right of access to conduct research through their organisation for the purpose and on the terms and conditions set out below. This right of access commences on the 1st of March 2017 and ends on 29th of September 2017.

The organisation is satisfied that the research activities that you will undertake in the organisation are commensurate with the activities you undertake for your employer. Your employer is fully responsible for ensuring such checks as are necessary have been carried out. Your employer has confirmed in writing to this organisation that the necessary pre-engagement checks are in place in accordance with the role you plan to carry out in the organisation. Evidence of checks should be available on request to 2gether NHS Foundation *Trust.*

You have a right of access to conduct such research as confirmed in writing in the letter of permission for research from this organisation. Please note that you cannot start the research until the Principal Investigator for the research project has received a letter from us giving the organisation(s) permission to conduct the project.

You are considered to be a legal visitor to 2gether NHS Foundation Trust premises. You are not entitled to any form of payment or access to other benefits provided by 2gether NHS Foundation Trust to employees and this letter does not give rise to any other relationship between you and 2gether NHS Foundation Trust or this organisation, in particular that of an employee.

While undertaking research through to 2gether NHS Foundation Trust you will remain accountable to your employer but you are required to follow the reasonable instructions of your nominated manager in in each organisation or those given on her/his behalf in relation to the terms of this right of access.

Where any third party claim is made, whether or not legal proceedings are issued, arising out of or in connection with your right of access, you are required to co-operate fully with any investigation by to 2gether NHS Foundation Trust or this organisation in connection with any such claim and to give all such assistance as may reasonably be required regarding the conduct of any legal proceedings.

You must act in accordance with policies and procedures, which are available to you upon request, and the Research Governance Framework.

You are required to co-operate with 2gether NHS Foundation Trust in discharging its duties under the Health and Safety at Work etc Act 1974 and other health and safety legislation and to take reasonable care for the health and safety of yourself and others while on NHS 2gether NHS Foundation Trust premises. Although you are not a contract holder, you must observe the *same standards* of care and propriety in dealing with patients, staff, visitors, equipment and premises as is expected of a contract holder and you must act appropriately, responsibly and professionally at all times.

If you have a physical or mental health condition or disability which may affect your research role and which might require special adjustments to your role, if you have not already done so, *you must* notify your employer and each participating [Insert organisation] prior to commencing your research role at each site.

You are required to ensure that all information regarding patients or staff remains secure and *strictly confidential* at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice and the Data Protection Act 1998. Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

The organisation will not indemnify you against any liability incurred as a result of any breach of confidentiality or breach of the Data Protection Act 1998. Any breach of the Data Protection Act 1998 may result in legal action against you and/or your substantive employer.

You should ensure that, where you are issued with an identity or security card, a bleep number, email or library account, keys or protective clothing, these are returned upon termination of this arrangement. Please also ensure that while on the premises you wear your ID badge at all times, or are able to prove your identity if challenged. Please note that the organisation(s) accept no responsibility for damage to or loss of personal property.

This letter may be revoked and your right to attend the organisation terminated at any time either by giving seven days' written notice to you or immediately without any notice if you are in breach of any of the terms or conditions described in this letter or if you commit any act that we reasonably consider to amount to serious misconduct or to be disruptive and/or prejudicial to the interests and/or business of the organisation(s) or if you are convicted of any criminal offence. You must not undertake regulated activity if you are barred from such work. If you are barred from working with adults or children this letter of access is immediately terminated. Your employer will immediately withdraw you from undertaking this or any other regulated activity and you MUST stop undertaking any regulated activity immediately.

Your substantive employer is responsible for your conduct during this research project and may in the circumstances described above instigate disciplinary action against you.

If your circumstances change in relation to your health, criminal record, professional registration or suitability to work with adults or children, or any other aspect that may impact on your suitability to conduct research, or your role in research changes, you must inform the organisation that employs you through its normal procedures. You must also inform the nominated manager in each participating organisation..

Yours sincerely

Mark Walker
Senior Research Manager – Governance
Gloucestershire Research Support Service

Appendix K (MRP): Material Pack

Study Information Booklet.

What to do next if I'm interested?

If you've already provided verbal consent to whomever gave you this sheet, I should be in touch with you soon. If you did not provide consent but would like to participate or wish to discuss the study further (or if you don't hear from me within a few days!), please let whomever gave you this sheet know and I'll contact you. Alternatively, you're also more than welcome to contact me directly using the details below:

Contact Me

Jara Falkenburg
Clinical Psychologist in Training
Doctorate in Clinical Psychology
University of Bath
Phone: [redacted]
Email: J.Falkenburg@bath.ac.uk

You can also get in touch with one of my supervisors:

Lorna Hogg
Clinical Psychologist, Lecturer & Clinical Tutor
Doctorate in Clinical Psychology
Department of Psychology
University of Bath
Claverton Down Road
Bath, North East Somerset
BA2 7AY, England

Email: L.I.Hogg@bath.ac.uk
Tel: 01225 385506

Dr. Megan Wilkinson-Tough
Clinical Psychologist, Lecturer & Clinical Tutor
Doctorate in Clinical Psychology
Department of Psychology
University of Bath
Claverton Down Road
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Email: M.J.Wilkinson-Tough@bath.ac.uk
Tel: 01225 386563

Dr. Louise Horner-Baggs
Consultant Clinical Psychologist
2gether NHS Foundation Trust
Inpatient Services & Complex Care
Wotton Lawn, Horton Road
Gloucester,
Gloucestershire
GL1 3WL, England

Email: L.Horner-Baggs@nhs.net
Tel: 01452 894500

UNIVERSITY OF BATH

V4:02012017

The role of problem-solving in social anxiety, unusual experiences and thoughts, and imagery

Participant Information Booklet

[redacted]

Hi! I'm Jara.

I'm a trainee clinical psychologist who's really interested in helping people better understand each other.

One way I try doing this is through research, like the study described in this booklet. I'm also hoping the study will help improve care for people with certain mental health issues.

I'd like to invite you to take part in my study.

However, before you decide, it's important for you to understand why the study is being done and what it'll involve. Please take time to read the following information carefully and discuss it with others if you wish.

I'd be happy to then go through this booklet with you and answer any questions. Please tell me if there's anything unclear or if you'd like more information. Please then take time to decide whether or not you wish to take part.

V4:02022017

Table of Contents

Space to write notes or questions:

My appointment with Jara is on ____ / ____ / _____ at __:___

We're meeting at _____(location)

Who has reviewed the study?

All research in the NHS is reviewed and approved by independent groups of people to protect your interests. The ethics of this study have been reviewed (through the Integrated Research Application System; IRAS ID: 199896) and been given a favourable opinion by an NHS Research Ethics Committee (Wales REC 2), your local NHS Trust's Research and Development Department, and the University of Bath's Psychology Ethics Committee.

Why am I being invited?

Purpose of the study

The study aims to discover more about some peoples' experiences of social anxiety and unusual thoughts. I'm especially interested in the role of problem-solving and imagery in these experiences, and possible links between them. It's hoped the study will contribute to knowledge about both social anxiety and paranoia and lead to improved assessment and care.

Why me?

In total, I hope to compare 3 groups of 25 participants each:

1) people with difficult anxiety in social situations;

2) people who experience difficult and unusual thoughts and feelings; and

3) people without social anxiety or unusual thoughts and experiences. The study will therefore have up to 75 participants in total.

You're being invited to take part because you've either expressed interest in participating, or have been identified by someone involved in your care as a person who experiences social anxiety or difficult and unusual thoughts and feelings.

To participate, you must be contactable by phone, speak sufficient English, be over age 18, and able to travel to the appointment location (see p.2 for more info).

When & where?

If you agree to take part it will involve meeting with me for 1 to 1.5 hours at one of the following locations chosen by you:

- a clinic room at the service that provides your care/a room at the charity of which you are a member,
- the University of Bath.

The exact date will depend on your and my availability.

"Do I have to take part?"

No, it's up to you to decide whether or not to take part. If you do decide to take part, you'll be given this information sheet to keep and be asked to sign a consent form.

If you decide to take part and then change your mind, you're still free to withdraw at any time without giving a reason (whether before you start the study, during it, or afterwards). You can also request any data already collected to be withdrawn from my write-up.

A decision to take part, to withdraw at any time, or not to take part will not affect any treatment you're currently receiving or will receive in the future.

Some other important information…

What will happen to the results of the study?
I hope to report our findings in academic/health related journals and present them to relevant health professionals at meetings and conferences. Findings will also contribute to my Doctorate in Clinical Psychology. You won't be identified in any reports or publications arising from the study. You'll be given a summary of the findings if interested at the end of the study.

What will happen if I want to withdraw from the study?
You're free to withdraw from the study at any time. If you decide to withdraw after already participating in the study, I won't use any of your information in any of my write-ups.

What if there is a problem or something goes wrong?
I hope you'll be pleased to have taken part. However, if you have any concerns or wish to complain about any aspect of the way you've been approached or treated as part of this study, you should let me know and I'll do my best to answer your questions and address your issues. If this doesn't help, you could approach one of the project supervisors, Lorna Hogg, Dr. Megan Wilkinson-Tough, or Dr. Louise Horner-Baggs. All contact details are provided at the end of this booklet. If you remain unhappy and wish to complain formally, you can contact the University of Bath Secretary, Mark Humphriss, on 01225286212 or universitysec@bath.ac.uk. Every care will be taken to ensure your safety during the course of the study. The University of Bath, the Research Governance Sponsor of the study, has indemnity (insurance) arrangements in place but I anticipate that you'll find being part of the study a positive experience.

Advantages & disadvantages

Are there any disadvantages/risks to taking part?

I consider there to be minimal disadvantages to taking part. One possibility is that you might find it inconvenient to attend the appointment. However, we'll try to arrange this so it causes the least disruption and inconvenience to you. Although I'd never require you to speak if you do not wish to, you may feel pressure to reveal feelings or experiences and feel vulnerable during or after the interview. It's therefore important for you to understand you wouldn't be required to discuss anything that you wouldn't want to and you should discuss only the things which you feel are relevant. You might experience some distress, although I don't expect you to experience any beyond what you would experience in your daily life. It's important for you to say if you feel too upset to continue. You're free to take a break or withdraw from the study completely at any point.

Are there any advantages/benefits from taking part?

I can't promise the study will help you directly. However, the information collected from you and other participants will help me understand more about social anxiety and paranoia and improve care for people with these difficulties. You'll also be offered the opportunity to take part in a relaxation exercise and given written resources on how to continue using this exercise yourself and on managing anxiety. Some people have also reported that taking part in research can be an empowering experience.

Will I receive any payment if I take part?

You will be given £5 as a 'thank you' after taking part in the study.

What will I be asked to do?

Before meeting me

If this booklet was given to you by a professional, they'll have asked for your verbal consent to be approached by me about this study. In any case, you'll be given at least 48 hours from being given this booklet before I contact you to allow you time to process the information here, but you can take longer if you wish. You'll be given the opportunity to ask me questions and will then be asked whether you'd like to take part. If you're currently seeing a mental health professional, I'll ask your verbal consent to check with them that they're also ok with you participating. If you agree and I still think you're eligible, I'll arrange a suitable appointment time and place with you.

During our appointment

On arrival you'll have the opportunity to ask any further questions and be asked to sign a consent form. If you contacted me yourself (i.e. you weren't recruited through an organisation/professional) AND currently experience mental health issues BUT are not seeing a mental health professional, I'll ask you to write down your GP's details who I'll only contact if you become very distressed during the study (although I don't anticipate this). I'll then ask you to complete a short questionnaire for some basic details (e.g. age & occupation).

You'll then be asked to complete 3 questionnaires about: (1) anxiety in social situations, (2) your mood, and (3) thoughts you have that you or others may consider unusual or special. Completing these should take max 20 min. You'll then be asked to complete 3 shorter questionnaires about current: (1) social anxiety, (2) mood, and (3) thoughts that may be considered unusual or special. Completing these should take 3 min.

I'll then ask you to work on a problem-solving task for 15 minutes. After this task, I'll ask you to complete the same 3 shorter questionnaires (again taking around 3 minutes).

Optional interview

You can choose to participate in an interview of around 20-30 minutes to discuss the experiences of imagery you had during the task. An example of the sort of question I would ask you is:

"Did you have an image or picture going through your mind during the task?"

This optional interview would be audio-recorded, but would be anonymized and accessed only by study personnel (see p. 5 for further information).

End of our appointment

Most people find the experience of participating interesting and stimulating. However, you're free to take a break at any time, or to withdraw from the study should you wish to do so.

There'll be an opportunity to participate in a short **relaxation exercise** as a pleasant way of ending the appointment (lasting around 5 min). You can choose from 3 relaxation exercises.

You'll then be given further information about the study and be offered materials about managing anxiety and unusual thoughts.

On completion of the study (likely Aug-Sept 2017), I'll email you a summary of findings if you decide to write your email on the consent form. I might contact you after the study to ensure you're ok.

Your participation would be expected to last 1 to 1.5 hours in total (partly depending on whether you choose to do the interview).

Will my data be kept confidential?

Yes, all information collected about you during the course of the research will be kept confidential and conform to the 1998 Data Protection Act with respect to data collection, storage, and destruction. This means all paper-based information will be kept in a locked container and all electronic information (including audio recordings) will be password protected and encrypted, with access restricted to study personnel. Any information about you will have your name and address removed so you cannot be identified from it, except for the consent form. Your consent form will be kept separate from other data in a locked container so they cannot be linked. Data will only be kept as necessary and securely destroyed after 5 years, consistent with Good Practice Guidelines for the conduct of research in the NHS. The Research Governance Sponsor of this study, the University of Bath, may monitor or audit this study to ensure that it is being conducted appropriately but your identity will not be revealed.

To ensure all the valuable information that participants provide will be captured, written notes will be taken. **If you choose to do the interview, I'll ask you whether I can use an audio recorder during the interview**. Recordings will only be used by study personnel and will not be heard by or made available to any third party. You and other participants will be asked not to use any names during the interview to further protect confidentiality. You may also request that the recording be paused at any time, choose how much or how little you want to speak, and choose to leave at any time. The recordings will be transcribed (typed up), but will not include any identifying information. We may use direct quotes from the interview in our write-up, but there'll be no information to identify you from the quote or even for anyone to know that you participated in the study. The recordings will be destroyed on completion of the study.

There is one exception when I can't guarantee confidentiality: as NHS employee it's my duty to inform public services (e.g. your GP, Care Coordinator (if applicable), Social Services, the police) if you tell me anything that indicates that you or someone else is at risk, or there has been criminal activity or professional malpractice.

Pre-anxiety-task consent form.

University of Bath Sub-department of Clinical Psychology

IRAS reference: 199896 Centre/site reference: Participant reference number for study:

Participant Consent Form:

The role of problem-solving in social anxiety, unusual experiences and thoughts, and imagery

Your researcher is a Clinical Psychologist in training. She is based in the NHS and also registered with the University of Bath, undertaking a Doctorate in Clinical Psychology. Her work in this study is being conducted under the supervision of Lorna Hogg (Clinical Psychologist/Tutor/Lecturer at the University of Bath), Dr. Megan Wilkinson-Tough (Clinical Psychologist/Tutor/Lecturer at the University of Bath), and Dr. Louise Horner-Baggs (Consultant Clinical Psychologist at 2gether NHS Foundation Trust).

The researcher will have explained the following to you:

- The nature and purpose of the study;
- Why you have been asked to participate in the study;
- What will be required of you as part of the study;
- That the optional interview is to be audio recorded and the reasons for this;
- That the information that you provide will be made anonymous and kept confidential, except in the circumstances where information is provided that may place the participant or others at risk;
- That anonymised quotes from your optional interview may be used in the write-up of this study;
- That you have the right to withdraw from the study at any point you wish and that you can request for any information that you have provided to be withdrawn from the study;
- Participation or not in the study will not affect service user access to treatment or employment
- That some information collected during the study *may* be looked at by responsible individuals from the sponsor (University of Bath) for the purpose of monitoring or auditing, to ensure that the study is being conducted appropriately.

Please tick:

1. I have read (or read with someone) and understand the Participant Information Booklet (v4:02.02.2017) about this study. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily. ☐
2. I agree for Jara Falkenburg and study personnel to have access to the information produced from my responses for the purposes of this study. ☐
3. I wish to be informed about the results of this study. ☐

Please send information to: _____

4. I have had the above explained to me and I wish to participate in this study. ☐
5. I also wish to participate in the optional 20-30-minute interview about my experience during the study ☐
6. I have had the above explained to me but I do not wish to participate in the study. ☐
7. I also give permission to be contacted about other relevant research ☐

If you do want to take part, please print and sign your name below:

Name of participant (Print)	Signature of participant	Date
Name of researcher (Print)	Signature of researcher	Date

THANK YOU FOR YOUR HELP.

Patient Identification Number: __ (When competed: 1 copy for participant; 1 copy (original) for researcher's file)

University of Bath **Sub-department of Clinical Psychology**

IRAS reference: 199896 Centre/site reference: Participant reference number for study:

Participant Consent Form:

The role of problem-solving in social anxiety, unusual experiences and thoughts, and imagery

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You will only be asked to complete this part of the consent form if:

- you referred yourself to this study (i.e. you were NOT recruited through a mental health organisation or professional);
- AND you have told the researcher that you currently experience mental health issues;
- AND you have told the researcher that you are NOT currently being seen by a mental health service or professional.

If the above apply to you, please provide the contact details of your General Practitioner (GP) below to take part.

Your GP will ONLY be contacted if you become extremely distressed during the study AND if this distress continues after we have done the relaxation exercises, although I do not expect you to experience any distress beyond what you would experience in your daily life. However, I will let you know if I do think your GP needs to be contacted BEFORE I contact them, so you will always be informed.

GP's full name: _____

GP's address: _____

_____

_____

GP's phone number: _____

I agree for my GP to be contacted if I become extremely distressed during the study AND this distress continues after we have done the relaxation exercises ☐

If you currently experience mental health issues AND are being seen by a mental health organisation or professional, please tick this box to show you agree for your mental health professional to be contacted if you become extremely distressed during the study AND the distress continues after we have done the relaxation exercises ☐

Sociodemographic questionnaire.

Demographic Questionnaire

Study Title: The role of problem-solving in social anxiety, unusual experiences and thoughts, and imagery

Thank you for taking part in the study today. Before we begin, please answer the following questions about yourself. This is to let us know whether our study has included a good range of people. Please leave blank any questions that you do not feel comfortable answering.

a. Your age: ___ ☐ prefer not to say

b. Your sex (please tick) ☐ male ☐ female ☐ other: ___ ☐ prefer not to say

c. What is your ethnic group? Choose one option that best describes your ethnic group or background

White

- ☐ English/Welsh/Scottish/Northern Irish/British
- ☐ Irish
- ☐ Gypsy or Irish Traveller
- ☐ Any other White background, please describe

_____

Mixed/Multiple ethnic groups

- ☐ White and Black Caribbean
- ☐ White and Black African
- ☐ White and Asian
- ☐ Any other Mixed/Multiple ethnic background, please describe

_____

Asian/Asian British

- ☐ Indian
- ☐ Pakistani
- ☐ Bangladeshi
- ☐ Chinese
- ☐ Any other Asian background, please describe

_____

Black/ African/Caribbean/Black British

- ☐ African
- ☐ Caribbean
- ☐ Any other Black/African/Caribbean background, please describe

_____

Other ethnic group

- ☐ Arab
- ☐ Any other ethnic group, please describe _____
- ☐ Prefer not to say

d. What is your religion? Choose one option that best describes your religion.

- ☐ No religion
- ☐ Christian (all denominations)
- ☐ Buddhist
- ☐ Hindu
- ☐ Jewish
- ☐ Muslim
- ☐ Sikh
- ☐ Any other religion, please describe _____
- ☐ Prefer not to say

e. Which of the following describes your current employment situation (tick all that apply)?

- ☐ Employed for wages
- ☐ Self-employed
- ☐ Out of work and looking for work
- ☐ Out of work but not currently looking for work
- ☐ Homemaker
- ☐ Student
- ☐ Military
- ☐ Retired
- ☐ Unable to work
- ☐ Voluntary
- ☐ Other (please specify) _____
- ☐ Prefer not to say

f. What is the highest degree or level of school you have completed?

- ☐ Pre-GCSEs
- ☐ GCSEs
- ☐ A-Levels
- ☐ Undergraduate degree
- ☐ Postgraduate degree
- ☐ Doctoral degree
- ☐ Other (please specify) _____
- ☐ Prefer not to say

g. What is your marital status?

- ☐ Single, never married
- ☐ Married or domestic partnership
- ☐ Widowed
- ☐ Divorced
- ☐ Separated
- ☐ Other (please specify) _____
- ☐ Prefer not to say

h. Which mental health diagnoses, if any, have been given to you / would you say you have (e.g. depression, psychosis, social anxiety, personality disorder)? (please list)

_____

- ☐ Prefer not to say

DASS-21.

DASS 21 NAME _____ DATE _____

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all - NEVER

1 Applied to me to some degree, or some of the time - SOMETIMES

2 Applied to me to a considerable degree, or a good part of time - OFTEN

3 Applied to me very much, or most of the time - ALMOST ALWAYS

		N	S	O	AA	FOR OFFICE USE D	A	S
1	I found it hard to wind down	0	1	2	3			
2	I was aware of dryness of my mouth	0	1	2	3			
3	I couldn't seem to experience any positive feeling at all	0	1	2	3			
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3			
5	I found it difficult to work up the initiative to do things	0	1	2	3			
6	I tended to over-react to situations	0	1	2	3			
7	I experienced trembling (eg, in the hands)	0	1	2	3			
8	I felt that I was using a lot of nervous energy	0	1	2	3			
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3			
10	I felt that I had nothing to look forward to	0	1	2	3			
11	I found myself getting agitated	0	1	2	3			
12	I found it difficult to relax	0	1	2	3			
13	I felt down-hearted and blue	0	1	2	3			
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3			
15	I felt I was close to panic	0	1	2	3			
16	I was unable to become enthusiastic about anything	0	1	2	3			
17	I felt I wasn't worth much as a person	0	1	2	3			
18	I felt that I was rather touchy	0	1	2	3			
19	I was aware of the action of my heart in the absence of physicalexertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3			
20	I felt scared without any good reason	0	1	2	3			
21	I felt that life was meaningless	0	1	2	3			
	TOTALS							

Social Interaction Anxiety Scale.

Social Interaction Anxiety Scale (SIAS)

Patient Name: _____ **Date:** _____

Instructions: For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. The rating scale is as follows:

0 = **Not at all** characteristic or true of me.
1 = **Slightly** characteristic or true of me.
2 = **Moderately** characteristic or true of me.
3 = **Very** characteristic or true of me.
4 = **Extremely** characteristic or true of me.

CHARACTERISTIC	NOT AT ALL	SLIGHTLY	MODERATELY	VERY	EXTREMELY
1. I get nervous if I have to speak with someone in authority (teacher, boss, etc.).	0	1	2	3	4
2. I have difficulty making eye contact with others.	0	1	2	3	4
3. I become tense if I have to talk about myself or my feelings.	0	1	2	3	4
4. I find it difficult to mix comfortably with the people I work with.	0	1	2	3	4
5. I find it easy to make friends my own age.	0	1	2	3	4
6. I tense up if I meet an acquaintance in the street.	0	1	2	3	4
7. When mixing socially, I am uncomfortable.	0	1	2	3	4
8. I feel tense if I am alone with just one other person.	0	1	2	3	4
9. I am at ease meeting people at parties, etc.	0	1	2	3	4
10. I have difficulty talking with other people.	0	1	2	3	4
11. I find it easy to think of things to talk about.	0	1	2	3	4
12. I worry about expressing myself in case I appear awkward.	0	1	2	3	4
13. I find it difficult to disagree with another's point of view.	0	1	2	3	4
14. I have difficulty talking to attractive persons of the opposite sex.	0	1	2	3	4
15. I find myself worrying that I won't know what to say in social situations.	0	1	2	3	4
16. I am nervous mixing with people I don't know well.	0	1	2	3	4
17. I feel I'll say something embarrassing when talking.	0	1	2	3	4
18. When mixing in a group, I find myself worrying I will be ignored.	0	1	2	3	4
19. I am tense mixing in a group.	0	1	2	3	4
20. I am unsure whether to greet someone I know only slightly.	0	1	2	3	4

Social Phobia Scale.

Part 2 – Social Phobia Scale

Instructions: For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. The rating scale is as follows:

. 0 = **Not at all** characteristic or true of me.

. 1 = **Slightly** characteristic or true of me

. 2 = **Moderately** characteristic or true of me.

. 3 = **Very** characteristic or true of me.

. 4 = **Extremely** characteristic or true of me.

Characteristic	Not at all	Slightly	Moderately	Very	Extremely
1. I become anxious if I have to write in front of other people	0	1	2	3	4
2. I become self-conscious when using public toilets	0	1	2	3	4
3. I can suddenly become aware of my own voice and of others listening to me	0	1	2	3	4
4. I get nervous that people are staring at me as I walk down the street	0	1	2	3	4
5. I fear I may blush when I am with others	0	1	2	3	4
6. I feel self-conscious if I have to enter a room where others are already seated	0	1	2	3	4
7. I worry about shaking or trembling when I'm watched by other people	0	1	2	3	4
8. I would get tense if I had to sit facing other people on a bus or a train	0	1	2	3	4
9. I get panicky that others might see me to be faint, sick or ill	0	1	2	3	4
10. I would find it difficult to drink something if in a group of people	0	1	2	3	4
11. It would make me feel self-conscious to eat in front of a stranger at a restaurant	0	1	2	3	4
12. I am worried people will think my behaviour odd	0	1	2	3	4

13. I would get tense if I had to carry a tray across a crowded cafeteria	0	1	2	3	4
14. I worry I'll lose control of myself in front of other people	0	1	2	3	4
15. I worry I might do something to attract the attention of others	0	1	2	3	4
16. When in an elevator I am tense if people look at me	0	1	2	3	4
17. I can feel conspicuous standing in a queue	0	1	2	3	4
18. I get tense when I speak in front of other people	0	1	2	3	4
19. I worry my head will shake or nod in front of others	0	1	2	3	4
20. I feel awkward and tense if I know people are watching me	0	1	2	3	4

Green et al. Paranoid Thoughts Scale.

Participant number
Date

Questionnaire 8

Please read each of the statements carefully.
They refer to thoughts and feelings you may have had **about others over the last month**.
Think about the **last month** and indicate the extent of these feelings from **1 (Not at all)** to **5 (Totally). Please complete both Part A and Part B.**

(N.B. Please do not rate items according to any experiences you may have had under the influence of drugs.)

Part A.	Not at all		Somewhat		Totally
1. I spent time thinking about friends gossiping about me	1	2	3	4	5
2. I often heard people referring to me	1	2	3	4	5
3. I have been upset by friends and colleagues judging me critically	1	2	3	4	5
4. People definitely laughed at me behind my back	1	2	3	4	5
5. I have been thinking a lot about people avoiding me	1	2	3	4	5
6. People have been dropping hints for me	1	2	3	4	5
7. I believed that certain people were not what they seemed	1	2	3	4	5
8. People talking about me behind my back upset me	1	2	3	4	5
9. I was convinced that people were singling me out	1	2	3	4	5
10. I was certain that people have followed me	1	2	3	4	5
11. Certain people were hostile towards me personally	1	2	3	4	5
12. People have been checking up on me	1	2	3	4	5
13. I was stressed out by people watching me	1	2	3	4	5
14. I was frustrated by people laughing at me	1	2	3	4	5
15. I was worried by people's undue interest in me	1	2	3	4	5
16. It was hard to stop thinking about people talking about me behind my back	1	2	3	4	5

Participant number
Date

Part B.	Not at all		Somewhat		Totally
1. Certain individuals have had it in for me	1	2	3	4	5
2. I have definitely been persecuted	1	2	3	4	5
3. People have intended me harm	1	2	3	4	5
4. People wanted me to feel threatened, so they stared at me	1	2	3	4	5
5. I was sure certain people did things in order to annoy me	1	2	3	4	5
6. I was convinced there was a conspiracy against me	1	2	3	4	5
7. I was sure someone wanted to hurt me	1	2	3	4	5
8. I was distressed by people wanting to harm me in some way	1	2	3	4	5
9. I was preoccupied with thoughts of people trying to upset me deliberately	1	2	3	4	5
10. I couldn't stop thinking about people wanting to confuse me	1	2	3	4	5
11. I was distressed by being persecuted	1	2	3	4	5
12. I was annoyed because others wanted to deliberately upset me	1	2	3	4	5
13. The thought that people were persecuting me played on my mind	1	2	3	4	5
14. It was difficult to stop thinking about people wanting to make me feel bad	1	2	3	4	5
15. People have been hostile towards me on purpose	1	2	3	4	5
16. I was angry that someone wanted to hurt me	1	2	3	4	5

Visual Analogue Scales.

Visual Analogue Scales

Section 1 (VAS-SA)

Please rate how much each statement applies to you **RIGHT NOW** by placing a mark on each line:

1. I am worried about what other people are thinking of me

   Not at all - 0 _____ **100 - Totally**

2. I am afraid other people are noticing my shortcomings

   Not at all - 0 _____ **100 - Totally**

3. I am afraid that others do not approve of me

   Not at all - 0 _____ **100 - Totally**

4. I am worried I am saying or doing the wrong things

   Not at all - 0 _____ **100 - Totally**

5. I feel uncomfortable and embarrassed

   Not at all - 0 _____ **100 - Totally**

6. I feel anxious

   Not at all - 0 _____ **100 - Totally**

Section 2 (VAS-P)

Please rate how much each statement applies to you **RIGHT NOW** by placing a mark on each line:

1. I am being deliberately harmed or upset

   Not at all - 0 _____ **100 - Totally**

2. I am being followed

   Not at all - 0 _____ **100 - Totally**

3. There is a conspiracy against me

   Not at all - 0 _____ **100 - Totally**

4. I am being persecuted

Not at all - 0 _____ **100 - Totally**

5. I am being laughed at behind my back

Not at all - 0 _____ **100 - Totally**

6. I am feeling under threat

Not at all - 0 _____ **100 - Totally**

Section 3 (VAS-D)

Please rate how much each statement applies to you **RIGHT NOW** by placing a mark on each line:

1. I am feeling distressed

Not at all - 0 _____ **100 - Totally**

2. I am aware of dryness in my mouth

Not at all - 0 _____ **100 - Totally**

3. I can't seem to experience any positive feeling at all

Not at all - 0 _____ **100 - Totally**

4. I feel I am using a lot of nervous energy

Not at all - 0 _____ **100 - Totally**

5. I feel I have nothing to look forward to

Not at all - 0 _____ **100 - Totally**

6. I am feeling agitated

Not at all - 0 _____ **100 - Totally**

7. I don't feel worth much as a person

Not at all - 0 _____ **100 - Totally**

Relaxation Exercises

Choice 1: Positive "Safe Place" Visualisation

- Engage in your soothing rhythm breathing and when you're ready try to create a place in your mind – a place that could give you the feeling of safeness and calmness.
- Close eyes if comfortable doing so
- Imagine a real/imagined safe place where you can feel calm, peaceful and safe. It may be place you've been to before, somewhere you've dreamed about going to, or maybe somewhere you've seen a picture of.
- Imagine looking around you, what can you see? It might be a beautiful wood where the leaves of the trees dance gently in the breeze. Powerful shafts of light caress the ground with brightness. Or it may be a beautiful beach with a crystal blue sea stretching out to the horizon where it meets the ice blue sky. Or relaxing next to a log fire. Can you imagine one? What is it like?
- Focus on what you can see. What objects or people are around you, if any? What are the colours in your peaceful safe place?
- Next think about the sounds around you, what can you hear? perhaps the silence. Can you hear the rustle of the leaves on the trees, or birds, or crackling fire or the gentle hushing of the waves on the sand?
- Now focus on what you can feel, on any skin sensations – the earth beneath you, the temperature, any movement of air, anything else you can touch. This could be the sensation of the sun on your face or a breeze caressing your hair. Or can you feel soft, white fine sand underfoot, which is silky to the touch.
- Now think about whether you can smell anything such as the salty smell of the sea or the smell of wood smoke or a sweetness of the air.
- When you bring your safe place to mind allow your body to relax. Think about your facial expression; allow it to have a soft smile of pleasure at being there.
- Imagine that, the place itself takes joy in you being here. Allow yourself to feel how your safe place has pleasure in you being here. Explore your feelings when you imagine this place is happy with you being there. Even if it is just a fleeting sense of where the image might be, try to create an emotional connection to this place.
- Now whilst you're in your peaceful & safe place, you might choose to give it a name, a word or phrase or symbol that you can use to bring that image back, anytime you need to

Choice 2: Breathing

Okay, now that you are sitting comfortably, place both feet flat on the floor about shoulder's width apart and rest your hands on your legs. Close your eyes, or look down at the floor if you prefer. Allow yourself to have a gentle facial expression may be a slight smile.

Now what we can do is just gently focus on our breathing. As you breathe try to allow the air to come down into your diaphragm (that's just at the bottom of your ribcage in the upside down 'V'). Feel your diaphragm, the area underneath your ribs, move as you breathe in and out. Just notice your breathing and play an experiment with your breathing. Breathe a little faster or a little slower until you find a breathing pattern that, for you, seems to be

your own soothing, comforting rhythm. It is like you are checking in, linking up, with the rhythm within your body that is soothing and calming to you.

What you will usually find is that your breathing is slightly slower and deeper than normal. The in breath is about 3 seconds … hold … and then take 3 seconds for the out-breath. Ensure that the breaths in and out are smooth and even. So, for example, notice if you're breathing in a bit too quickly or collapsing the out breath.

Now we can spend a little while – for as long as we wish - just focusing on our breathing, just noticing the breath coming down into the diaphragm, your diaphragm lifting and then the air moving out, through your nose. Sometimes it's useful to focus on the point just inside the nose where the air enters. So, in through your mouth and out from your nose, in through your mouth and out through your nose…….. Just focus on that for a while……

Now we can just 'ground ourselves for a moment'. So turn your attention to your body. Sensing the weight of your body resting on the chair and the floor underneath you…. Allowing yourself to feel held and supported…..coming to rest…in the present moment….

Remember that it is perfectly ok for your mind to wander. Simply notice it happening with curiosity about where your mind has gone and then gently guide your attention back to an awareness of your body as best as you can. Now just sense the flow of air coming in and out of your nostrils….just gently observing….no need to change anything…..just allowing things to be as they are.

If you find focusing on your breathing a bit difficult (and some people do) then allow your attention to rest on an object. Find something you might like to hold such as a smooth stone or a soft ball – something that gives you the feeling of gentleness and calmness. Now as you just focus on your breathing also focus on your object that you're holding noticing how it feels in your hand resting your gaze on your object as best as you can…. staying with the sensations of holding it in your hand.

When you feel ready, slowly open your eyes and bring yourself back to the present moment. Sometimes it helps if you just have a gentle stretch and a deep breath to prepare you to carry on with your day.

Choice 3: Compassionate Imagery

Engage in your soothing rhythm breathing and, when you're ready, imagine a colour that you associate with compassion, or a colour that conveys some sense of warmth and kindness. It might only be a fleeting sense of colour but when you are ready, imagine your compassionate colour surrounding you. Then, imagine this entering through your heart area and slowly through your body. Or you might prefer to think of colour like a mist or light that just flows though you. As this happens try to focus on this colour as having wisdom, strength and warmth, with a key quality of total kindness. Create a facial expression of kindness on your own face as you do this exercise.

Now, as you imagine the colour flowing through you focus on the feeling that the sole purpose of this colour is to help you, to strengthen you and support you.

Debrief Sheet.

Debrief Sheet

Study Title: What do the effects of an anxiety-task on state social anxiety and paranoia show about their relationship and the role of imagery? A mixed methods study

Deception During the Experiment

Thank you very much for taking part in this study. During the experiment, I asked you to solve a number of anagrams. You were originally told the study's purpose was to evaluate the role of problem-solving in social anxiety and unusual thoughts through this "Anagrams Task". This is not true, as the "Anagrams Task" was actually used to slightly increase your anxiety by giving you some anagrams that were impossible to solve. If I had told you the anagrams task was designed to increase your anxiety, you might not have felt anxious and I wanted you to respond as naturally as possible. However, you have the right to refuse any of your data to be used and to ask that they be destroyed immediately. If you do so, there's no penalty. You'll still receive full payment for the experiment. You'll be given a post-debrief consent form after reading this sheet to indicate whether you still agree for your data to be used or not.

If you feel you need support after learning about this deception, please let me know as I'd be happy to discuss this and the rest of the study with you further. You can also let me know if you wish to practice another relaxation exercise with me. If you'd like to discuss this with someone else, you can contact one of my supervisors (contact details on the next page), your GP, mental health professional (if you have one), or the Samaritans (a 24-hour helpline on 116 123). Depending on how distressed you feel, I might want to contact your GP or mental health professional (if you have one) and one of my supervisors anyway. If I think you're feeling very distressed, I might want to contact a local crisis team, A&E, or the police.

Background to the Study

Feeling anxious in social situations is a common experience for lots of people. For some people, this anxiety can become very difficult, and some people may be identified or identify themselves as having social anxiety. Brief unusual thoughts or passing suspiciousness are also experienced at some point by most people and is common in the general population. Examples of unusual thoughts or suspiciousness include thinking that other people are trying to irritate you or feeling like you are being watched. Passing suspicious or unusual thoughts can have a useful function. For example, if you think that someone might be following you when walking along a dark path, you may change your direction to feel safer. However, sometimes these levels of suspiciousness and paranoia can become distressing, and people may be identified or identify themselves as having a psychotic disorder (Lockett, 2011).

I'm happy to talk to you more about the reasons for the study, and I've included some academic details below in case you're interested:

Classification systems usually distinguish psychotic disorders from anxiety disorders (Gilbert, Boxall, Cheung, & Irons, 2005). Nonetheless, recent research demonstrates much overlap between these two categories of disorders. The relationship between social anxiety (one type of anxiety disorder) and paranoia (a common feature of psychotic disorders) has received particular attention, because studies show the two often occur together in people. Studies have also shown other similarities between them (Achim et al., 2011). Five theories have emerged regarding this relationship. One of the theories is that social anxiety and paranoia may lie on a continuum, with paranoia being a more severe type of anxious fear (Freeman et al., 2005). However, more research has been called for to clarify this.

Purpose and Design of the Study

This study aims to clarify the relationship between paranoia and social anxiety. It specifically aims to evaluate whether people with social anxiety may experience increased paranoia during heightened anxiety, at levels closer to people who experience paranoia more regularly (Taylor & Stopa, 2013). The study does this by introducing an anxiety-task and comparing three groups of people: 1) people who experience social anxiety; 2) people who experience paranoia; and 3) people who do not experience social anxiety or paranoia. By including this last group, the study evaluates whether effects are truly due to a relationship between the two conditions or whether the effects would occur anyway. The study also evaluates the experience of imagery during the anxiety-task through the semi-structured interview to further clarify the relationship and help reduce the lack of research on the role of imagery in paranoia.

Specifically, I am hoping to answer the following questions:

- What do the effects of an anxiety-task on social anxiety, paranoia, and affect show about the relationship between social anxiety and paranoia?
- Do paranoia and social anxiety lie on a continuum, with increased anxiety affiliated with escalating paranoia?
- How do individuals with paranoia, individuals with social anxiety, and individuals without paranoia and social anxiety experience imagery during a stressful task? Are there differences between these groups?
- Are there any differences on any of the above between different age groups, genders, ethnicities, and other demographic characteristics?

Intended Analysis

If you still agree for your data to be used, your interview may be transcribed (typed up) verbatim and analysed using a qualitative approach called "thematic content analysis". All questionnaire responses will also be statically analysed to see if there are any differences in scores before and after the anxiety-task.

Please remember all information I have collected will be kept confidential and anonymous and that you can still withdraw your data if you wish to do so. **If you have any questions or complaints regarding the experiment, please address me at my contact details below.** Alternatively, you can also contact my supervisors. Please see below for a list of relevant reading.

Main Researcher:	Lorna Hogg	Dr. Megan Wilkinson-Tough	Dr. Louise Horner-Baggs
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Relevant Reading

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Relevant Research

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Pictet, A. (2014). Looking on the bright side in social anxiety: The potential benefit of promoting positive mental imagery. *Frontiers in Human Neuroscience, 8*(43), 1-5. doi: 10.3389/fnhum.2014.00043

Rietdijk, J., Van Os, J., Graaf, R. d., Delespaul, P., & Gaag, M. v. d. (2009). Are social phobia and paranoia related, and which comes first? *Psychosis, 1*(1), 29-38.

Post debrief consent form.

University of Bath Sub-department of Clinical Psychology

IRAS reference: 199896 Centre/site reference: Participant reference number for study:

Post-Debrief Participant Consent Form:

The effects of an anxiety-task on social anxiety, unusual thoughts and experiences, and imagery

Your researcher is a Clinical Psychologist in training. She is based in the NHS and also registered with the University of Bath, undertaking a Doctorate in Clinical Psychology. Her work in this study is being conducted under the supervision of Lorna Hogg (Clinical Psychologist/Tutor/Lecturer at the University of Bath), Dr. Megan Wilkinson-Tough (Clinical Psychologist/Tutor/Lecturer at the University of Bath), and Dr. Louise Horner-Baggs (Consultant Clinical Psychologist at 2gether NHS Foundation Trust).

The researcher will **now** have explained the following to you both verbally and in writing through the Debrief Sheet:

- That you were deceived about the true nature of the Anagrams task, which was designed to mildly raise your anxiety (rather than to measure your problem-solving ability);
- The **true** nature and purpose of the study and why you have **truly** been asked to participate in the study;
- The support available to you following this deception, should you require it;
- That the information that you provide will be made anonymous and kept confidential, except in the circumstances where information is provided that may place the participant or others at risk;
- That anonymised quotes from your interview (if you took part) may be used in the write-up of this study;
- That you still have the right to withdraw from the study at any point you wish and that you can request for any information that you have provided to be withdrawn from the study;
- Participation or not in the study will not affect service user access to treatment or employment
- That some information collected during the study *may* be looked at by responsible individuals from the sponsor (University of Bath) for the purpose of monitoring or auditing, to ensure that the study is being conducted appropriately.

	Please tick:
1. I have read (or read with someone) and understand the Debrief Sheet (v2:23112016) about this study. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily.	☐
2. I still agree for Jara Falkenburg and study personnel to have access to the information produced from my responses for the purposes of this study.	☐
3. I wish to be informed about the results of this study. Please send information to: _____	☐
4. I have had the above explained to me and I still agree for my results from this study to be used.	☐
5. I have had the above explained to me but I do not agree for my results from this study to be used.	☐
6. I also give permission to be contacted about future research	☐

If you do agree for your results from this study to be used, please print and sign your name below:

Name of participant (Print)	Signature of participant	Date
Name of researcher (Print)	Signature of researcher	Date

THANK YOU FOR YOUR HELP.

Patient Identification Number: __

(When competed: 1 copy for participant; 1 copy (original) for researcher's file)

Study advert.

The role of problem-solving in social anxiety, unusual experiences and thoughts, and imagery

[redacted]

Hi! I'm Jara.

I'm a trainee clinical psychologist who's really interested in helping people better understand each other, and improving mental healthcare.

One way I try doing this is through research, like the study described here.

I'd like to invite you to take part in my study.

How can you help?

Please contact me if you :

- Are aged 18+
- Speak English

AND:

- You **DO experience** anxiety in social situations and/or paranoid thoughts and feelings

OR

- You **do NOT experience** any anxiety in social situations and/or paranoid thoughts

I will ask you to fill in some questionnaires before and after an Anagrams problem-solving activity

What can I offer you?

* £5 payment as a "thank you" for participating and contribution to travel costs
* Written resources on how to continue using similar exercises to manage anxiety
* The opportunity to take part in a relaxation exercise

I'm grateful to people who take part as the study can improve treatment for and understanding about social anxiety and paranoia, and would only take 1 – 1.5 hours at a location near you.

Interested in helping?

If you contact me, I'll first send you an information booklet. If you're still interested in taking part after this, we can arrange an appointment.

I'd be happy to hear from you at the **email or phone number on the right – feel free to rip off a tab.** Depending on where you read this, you might also be able to let reception or a staff member know you want to participate, or leave your details in a recruitment box nearby.

I look forward to hearing from you! – Jara Falkenburg

[redacted]

V2: 21112016 Ethics committee reference: 199896 / 16-253